

## **INVITATION FOR BIDS**

**Issue Date:** February 20, 2007

**IFB # 301:07-006**

**Title:** Gypsy Moth Aerial Insecticide Spraying

**Commodity Code:** 92610

**Issuing Agency:** Commonwealth of Virginia  
Department of Agriculture & Consumer Services  
Purchasing Office  
P. O. Box 1163  
Richmond, Virginia 23218

**Using Agency And/Or Location Where Work Will Be Performed:** The city of Alexandria and the counties of Bland, Clarke, Craig, Fairfax, Frederick, Giles, Pittsylvania, Prince William, Pulaski, Roanoke, and Wythe in the Commonwealth of Virginia.

**Period Of Contract:** From Award Date through June 25, 2007

**Sealed Bids Will Be Received Until:** 2:00 p.m. on March 13, 2007

For Furnishing the Services Described Herein and Then Opened in Public.

All Inquiries For Technical Information Should Be Directed To: Larry M. Nichols, VDACS Program Coordinator, Telephone (804) 786-3515 for Lot #1 and Lot #2; and Larry Bradfield, VDACS-STC Program Coordinator, Telephone (540) 394-2507 for Lot #3. Questions Related To Bid Submission And/Or Terms And Conditions Of This Invitation For Bids Should Be Directed To: Wendell Powell, Procurement Manager I, Telephone: (804) 786-3919, fax (804) 371-8372, or email at wendell.powell@vdacs.virginia.gov.

A copy of this solicitation is downloadable from the VDACS website, [www.vdacs.virginia.gov](http://www.vdacs.virginia.gov). Under Special Programs and quick links click on Procurement Opportunities for the Procurement Office page plus additional information on the Commonwealth's electronic/internet based procurement system, eVA.

If bids are mailed, send directly to issuing agency shown above. If bids are hand delivered (or delivered by courier or messenger service), deliver to: VDACS Procurement Office, Oliver W. Hill Building, 102 Governor Street, Richmond, VA 23219. It is the sole responsibility of the Bidder to ensure that his/her sealed bid is received by the due date and time. Late bids, or bids received unsealed, will not be accepted or considered. Electronic Bids are not allowed and cannot be accepted.

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In Compliance With This Invitation For Bids And To All The Conditions Imposed Therein, The Undersigned Offers And Agrees To Furnish The Services At The Price(s) Indicated In Section IX Pricing Schedule.

Name and Address of Firm:

\_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ By: \_\_\_\_\_

(Signature in Ink)

\_\_\_\_\_ Zip \_\_\_\_\_ Name: \_\_\_\_\_

(Please Print)

FEI/FINNo. \_\_\_\_\_ Title: \_\_\_\_\_

Fax Number: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

A Pre-Bid Conference Is Not Anticipated At This Time

**RETURN OF THIS PAGE IS REQUIRED**

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## I. PURPOSE

The intent and purpose of this Invitation for Bids (IFB) is to establish a fixed unit price contract on a per acre basis with one or more qualified firm(s) to provide an aerial application of *Bacillus thuringiensis kurstaki* (*Btk*), Diflubenzuron (Dimilin), and Gypchek on approximately 29,700 acres  $\pm$  10%, located in the city of Alexandria and the counties of Bland, Clarke, Craig, Fairfax, Frederick, Giles, Pittsylvania, Prince William, Pulaski, Roanoke, and Wythe within the Commonwealth of Virginia during the period specified. The 29,700 acres  $\pm$  10% will require a single application of insecticide. Table 1 below shows the specifics for each locality. The aerial spraying will be against the gypsy moth on behalf and in cooperation with the local governments, USDA-Forest Service (USDA-FS), and the Virginia Department of Agriculture and Consumer Services (VDACS).

Treatments in Lot #1 must be conducted using helicopters only. Treatments in Lot #2 and Lot #3 are open to bidders using helicopters or fixed-wing aircraft. The Contractor shall provide the *Btk*, Dimilin, and Carrier 038A (for Gypchek applications) and the cost of these materials must be included in the per acre bid. Gypchek (Lot #1) will be provided by VDACS. The *Btk* formulation to be used must be designated on the pricing schedule on this bid. The Contractor shall provide a functional Differentially Corrected Global Positioning System (DGPS) in all spray aircraft. Make and model of DGPS to be used must be designated on the pricing schedule on this bid.

Table 1. TREATMENT ACREAGE

<b>Lot #1</b>				
<b>Locality</b>	<b># Blocks</b>	<b>Block Acreage</b>	<b>Treatment Acres</b>	
			<b>Btk – 38 BIU/acre</b>	<b>Gypchek (Double Appl.)</b>
Alexandria	1	80	0	80
Fairfax	31	4,196	4,196	0
<b>Total</b>	<b>32</b>	<b>4,276</b>	<b>4,196</b>	<b>160</b>
<b>Total Contract Treatment Acres Lot #1</b>			<b>4,356</b>	

<b>Lot #2</b>					
<b>Locality</b>	<b>Number of Blocks</b>	<b>Block Acreage</b>	<b>Treatment Acres</b>		
			<b>Btk – 25.3 BIU/acre</b>	<b>Btk – 38 BIU/acre</b>	<b>Dimilin</b>
Clarke	5	397	0	0	397
Frederick	17	3,542	0	1,413	2,129
Prince William	15	3,851	3,851	0	0
<b>Total</b>	<b>37</b>	<b>2,573</b>	<b>3,851</b>	<b>1,413</b>	<b>2,526</b>
<b>Total Contract Treatment Acres Lot #2</b>			<b>7,790</b>		

<b>Lot #3</b>					
<b>County</b>	<b># Blocks</b>	<b>Block Acreage</b>	<b>Treatment Acres</b>		
			<b><i>Btk</i> – 25.3 BIU/acre (Single Appl.)</b>	<b><i>Btk</i> – 25.3 BIU/acre (Double Appl.)</b>	<b>Dimilin</b>
Bland	5	4,296	1,376	2,920	0
Craig	2	128	0	0	128
Giles	11	4,140	0	4,140	0
Pittsylvania	1	360	360	0	0
Pulaski	1	389	389	0	0
Roanoke	3	381	0	0	381
Wythe	1	400	0	400	0
<b>Total</b>	<b>24</b>	<b>10,094</b>	<b>2,125</b>	<b>14,920</b>	<b>509</b>
<b>Total Contract Treatment Acres Lot #3</b>			<b>17,554</b>		

## II. PREREQUISITES TO BIDDING

- A. Bidders desiring to submit a bid on the aerial spraying program must meet the following minimum requirements in order to have their bid considered:
1. Bidders must be certified as a commercial aircraft operator with an office, maintenance facilities, owned or leased aircraft, employees, mechanics, tools, equipment, and spare parts for the make and type of aircraft specified herein.
  2. Bidders must either (1) currently have a Virginia Pesticide Business License or (2) be able to obtain a Virginia Pesticide Business License within ten (10) days after notification of award of the contract. A copy of this license shall be submitted with the bid or immediately after obtaining it from the VDACS Office of Pesticide Services (Telephone: 804-786-3798).
  3. Application pilots must be (1) FAA certified to operate the aircraft to be used during performance of the contract and (2) certified as commercial pesticide applicators in Forestry Pest Control (Category 2) and Aerial Pesticide Application (Category 11) by VDACS' Office of Pesticide Services. Current commercial pesticide applicator certification in Forest Pest Control and Aerial Pesticide Application issued by another state is acceptable and VDACS will issue a Virginia Pesticide Applicator Certificate without an examination, provided that the pilot has never held a Virginia certificate, and if reciprocity has not previously occurred. Proper forms must be completed by any person requesting reciprocity before a Virginia Pesticide Applicator Certificate will be issued. These forms may be obtained by contacting the

VDACS Office of Pesticide Services at (804) 786-3798. In the event any pilot does not hold a current applicator certificate, one must be obtained within ten (10) days after notification of award of the contract. In addition, the application pilots to be utilized must have had at least two (2) seasons experience in low level seeding or spraying in residential areas for treatments in Lot #1; two (2) seasons experience in low level seeding or spraying residential areas and mountainous terrain for treatments in Lot #2; and two (2) seasons experience spraying mountainous terrain for treatments in Lot #3. Application pilots must be proficient at reading and navigating from topographic maps and in using Differential Global Positioning System (DGPS), and must meet or exceed the following experience minimums:

<u>APPLICATION PILOT</u>	<u>HOURS OF FLYING</u>
a. Total all aircraft.....	2,000
b. Type of aircraft to be used in contract .....	200
c. Night flying .....	10
d. Aerial application over terrain typical of lot bid:	
• Lot #1 - residential .....	50
• Lot #2 - residential and mountainous.....	50
• Lot #3 - mountainous.....	50
e. Weight class to be flown.....	100
f. Make and Model, and series to be flown on project .....	50

OBSERVATION PILOT (Lot #3 only)

a. Total all aircraft.....	750
b. Type of aircraft to be used in contract .....	500
c. Night flying.....	10
d. Aerial observation over forested acres in mountainous terrain .....	50
e. Weight class to be flown.....	100
f. Make and Model, preceding 60 days.....	10

Bidders **must** answer all questions on Attachment C pertaining to application pilot qualifications including the name of the pilot, commercial certificate number and limitations (if any), FAA medical certificate class and date of examination, flight hours in command (as specified), number of

seasons of forest spray experience, and other required information. Bidders must also fill out Attachment D pertaining to the observation aircraft and pilot qualifications. Attachments A, B, and C must be returned with the bid to VDACS by each Bidder. Attachment D must be returned with the bid by those submitting bids for Lot #3. VDACS reserves the right to reject any pilot whom in its opinion has performed unsatisfactorily in past projects, whether in Virginia or elsewhere. Examination of flight logs for verification of experience may be required at the discretion of the VDACS Contract Administrator.

4. **The specific aircraft to be utilized under any resulting contract must hold a FAA License and a Virginia Commercial Aircraft License. The Commercial Aircraft License is issued by the Virginia Department of Aviation and can be obtained by contacting the Virginia Department of Aviation, at (804) 236-3637. If a current license is not held, it must be obtained within ten (10) days after notification of award of the contract. A copy of the license must be filed with VDACS prior to the commencement of any work under this contract.**
5. Bidders must comply with qualification requirements as specified by the Virginia Department of Aviation and the Federal Aviation Administration and be certified under Federal Aviation Regulations Part 137 (Agricultural Aircraft Operations). Bidders must have a certificate of waiver from FAA when in restricted category as described in FAR Part 91.3. Such copies of certifications must be provided to VDACS prior to the commencement of any work under this contract.

- B. **All Bidders must totally complete Attachments A-C addressing the above prerequisites and show proof that the requirements have been met. If a Virginia Commercial Aircraft License (Attachment B) has not been obtained by bid submission time, it must be noted in Section 10 on Attachment B, along with a "Letter of Intent" stating that such will be obtained within 10 days after notification of award of the contract** (reference Section II, Paragraph A, Item 4). VDACS reserves the right to independently verify the information provided by the Bidders. Failure to provide this information and/or failure to meet the minimum requirements will result in the bid being declared non-responsive.

### III. SCOPE OF WORK

- A **GENERAL REQUIREMENTS:** The Contractor shall furnish application aircraft, observation aircraft (Lot #3 only) *Btk* and Dimilin insecticides, 038A Carrier, spray equipment, pilots, ground support equipment, DGPS units, and personnel, as specified herein, and other operational requirements, as necessary, to effectively, accurately, and uniformly apply *Btk*, Dimilin, and Gypchek insecticides. VDACS will provide Gypchek, topographical maps (1:24,000 scale) of the area to be treated, and personnel to monitor weather and deposition of the insecticide within treatment blocks. When observation aircraft are required (Lot #3), one observation aircraft will be required for every two treatment aircraft. Only one observation aircraft shall be required for application aircraft flying tandem within a treatment block.

- B. **AIRCRAFT REQUIREMENTS:** Only aircraft with turbine engines shall be utilized for aerial application treatments. Calculating fueling, loading, and ferrying time to and from the treatment blocks is important in determining the number of aircraft needed to obtain the minimum application rate.

**Since the possibility exists that the aerial application in Lots #1, #2, and #3 will occur simultaneously, a single Contractor that is awarded multiple lots shall not name the same aircraft on separate lots at the time of bid submission.**

See Attachment F for aircraft categories and assigned swath widths.

Table 2 indicates the types and minimum number of aircraft that must be used. Bidders may indicate on Attachment B any combination of aircraft to be used that are at least equal to the hourly production spray rates of the aircraft listed in Table 2 for each lot. VDACS reserves the right to determine if aircraft combinations, other than those listed in Table 2, will equal required production rates.

Table 2: Types and Minimum Number of Aircraft to be utilized. (Reference Attachment F for an explanation of aircraft categories.)

This contract will require a minimum of the following types of aircraft:

Lot #1:

- One Category A spray Helicopter, or
- Two Category B spray Helicopters, or
- Two Category C spray Helicopters, or
- One Category B and One Category C Helicopter

Lot #2:

- One Category A spray Helicopter, or
- Two Category B spray Helicopters, or
- Two Category C spray Helicopters, or
- One Category F Fixed-Wing Aircraft

Lot #3:

- Two Category A spray Helicopter, or
- Three Category B spray Helicopters, or
- Three Category C spray Helicopters, or
- Two Category F Fixed-Wing Aircraft

Treatments in Pittsylvania County (Whitmell Core Block – 360 acres) will occur earlier than treatments for the rest of Lot #3. Contractor will be required to furnish one Category A, one Category B, one Category C, or one Category F aircraft for treatments in the Whitmell Core block. Remaining treatment blocks in Lot #3 (Bland, Craig, Giles, Pulaksi, Roanoke, and Wythe counties) will require aircraft requirements as listed in Table 2.

The observation aircraft (Lot #3 only), when fully fueled must be able to fly at speeds that meet or exceed the spray aircraft. A high-wing aircraft is preferred as an observation aircraft for use with fixed wing application aircraft. A Bell Jet Ranger or equivalent is preferred as an observation aircraft for use with rotary wing application aircraft. Non-turbine engines are acceptable in the observation aircraft. Observation aircraft must use the same landing zone as treatment aircraft.

On Attachment B the Bidder must indicate the aircraft to be used on the contract, the FAA Aircraft Registration Number, Virginia Commercial Aircraft License Number, type and make of spray system, total carrying capacity, maximum load size that will routinely be used under the condition of the contract, boom length, and working speed of aircraft. Virginia Commercial Aircraft License Number information must be provided within ten (10) days of notification of award of contract, if not obtained by bid submission, as stated in Section II, Paragraph A of the Invitation for Bids.

1. HORSEPOWER: The Contractor shall not use any aircraft with less than 180 horsepower.
2. ENGINES: The aircraft engine shall be of turbine type and shall be in first class operating condition. Engine and airframe logs must be presented at time of inspection.
  - a. The engine must have operated a minimum of 50 hours.
  - b. The engine must have operated a minimum of 15 flight hours in the two (2) months prior to the beginning of the contract.
  - c. No aircraft will be accepted for this project with engine or component time within 100 hours from the maximum recommended by the manufacturer.
3. CONDITION: Each aircraft to be utilized shall be clean inside and out and shall fully comply with FAA directives and specifications and to any pertinent laws and regulations of the Commonwealth of Virginia.
4. SPRAY TIMER: The aircraft to be utilized for spraying shall be equipped with a digital timer that is activated automatically when the spray switch is operated. The timer must be capable of an accurate measurement of the cumulative spray time in minutes and tenths of minutes or seconds. Hour meters are not acceptable. Crop Hawk or equivalent flow monitoring systems are the preferable system. (If the Crop Hawk is utilized, it must be programmed to read in tenths of minutes). This will be a definite aid to the pilot in accurately monitoring flow rate during the aerial application. Date and time must be correct at time of calibration.
5. ELECTRICAL: Application aircraft shall be equipped with a system sufficient to handle the electrical load of 16 amps total.

- C. AIRCRAFT SPRAY SYSTEM: The Contractor shall furnish and equip the spray aircraft with the following minimum spray system:
1. TANKS: Leakproof corrosion-resistant tanks with exterior filler openings shall be used. The location and size of tanks shall not impair air-worthiness by overloading or displacing the center of gravity beyond acceptable limits. Filler openings or necks shall be large enough to prevent surging during filling. Tanks must be vented to the outside of the fuselage. By-pass return shall be through the bottom of tank to prevent foaming.
  2. EMERGENCY DUMP SYSTEM: The aircraft must be equipped with an emergency jettisonable load dumping system or emergency non-leaking dump valves of adequate capacity and adequately vented to dump the load and so installed to prevent blowback into the fuselage. In no case shall the ratio between load in gallons carried to the area of dump valves in square inches be greater than 7.65 to 1. Exposed valve control linkage must be protected to prevent unintentional opening of the valve in any manner. The control lever must be mounted in the cockpit within easy reach when the pilot is properly wearing the shoulder harness.
  3. PUMPING SYSTEM: The pumping system must be securely attached and capable of maintaining the pressure required ensuring the even distribution of the insecticide. All plumbing and pumps shall be large enough to handle the required flow. All parts shall be chemically resistant to the spray materials being used.
  4. PRESSURE GAUGE: An accurate liquid-filled spray pressure gauge 0-100 p.s.i.) shall be located on the boom so that it can be easily read by the pilot during flight.
  5. SHUTOFF: To avoid contamination of areas not scheduled for treatment, the entire spray system must be leakproof and have a positive shutoff mechanism capable of eliminating dripping from the nozzles.
  6. AUTOMATIC FLOW CONTROL: To provide a constant insecticide flow rate, spray systems must be equipped with automatic flow control that is connected to and controlled by aircraft's DGPS. Actual flow rate must be recorded in one-second intervals on aircraft's DGPS flight file.
  7. CLEAN SYSTEM: The aircraft spray system and tank must be cleaned of all foreign material and flushed with water prior to the start of this spray operation. During the spray program, it may be necessary to flush the spray system with water daily or when the operation is delayed because of bad weather, etc. (See additional Flushing Requirements in Section III, Paragraph K, Item 5).
  8. STRAINERS: The aircraft must be equipped with an in-line strainer to filter material before it enters the spray boom (30-mesh for *Btk* and *Gypchek*, 50-mesh for *Dimilin*). These strainers may be removed only at the discretion of VDACS, depending on the position of the strainer in the mixing tank.

9. SPRAY SYSTEM: Only rotary atomizers shall be allowed for both fixed wing aircraft and helicopters. For the purpose of this solicitation, nozzle(s) is interpreted to mean rotary atomizer(s).
- a. ROTARY ATOMIZERS
- (i) TYPE - Micronair, Beecomist, or similar VDACS approved rotary atomizers may be utilized.
  - (ii) SIZE - The proper size and type of rotary atomizer as specified by the manufacturer must be provided for the particular aircraft being utilized in order to produce a volume median diameter droplet size of approximately 125 microns for undiluted *Btk* applications and 200 microns for Dimilin and Gypchek applications.
  - (iii) INSTALLATIONS - The installation, adjustment, and calibration of the rotary atomizers, including number installed per aircraft, must be made in strict accordance with the manufacturer's recommendations. Any adjustments made to the atomizers shall be made by the Contractor under the supervision of VDACS.
- b. PUMP PRESSURE - Recommended operating pump pressure is 20-45 p.s.i. with the capability to increase or decrease pressure 25%.
- c. BOOM SPECIFICATIONS - Each aircraft shall be equipped with an approved standard boom system of the type most commonly employed in aerial applications of this nature. For rotary wing-aircraft, the total boom length shall not exceed 75% of the rotor diameter. It is recommended that the spray booms have removable caps and end plugs for ease of flushing the system. This system must have:
- (i) Nozzles located so material is not sprayed onto any part of the aircraft structure which may cause large drops during application.
  - (ii) All nozzles rigidly attached to the boom without flexible dropper hoses.
  - (iii) Bleeder lines installed at the ends of the boom feeding back to the outermost nozzles if that nozzle is installed more than five (5) inches from the boom end.
- d. PERFORMANCE REQUIREMENTS - The equipment must be capable of performing the following:
- (i) Delivery of appropriate amounts of insecticide formulation with a majority of droplet sizes approximately 125 microns for

undiluted *Btk* applications and 200 microns for Dimilin and Gypchek .

- (ii) Meeting the assigned effective swath widths listed in Attachment F. This assigned swath width should be utilized in preparation of bids as well as calculations for calibration.
- (iii) Due to the high viscosity of the *Btk* material, it is the Contractor's responsibility to contact the manufacturer and obtain any recommendations and/or specifications for *Btk* usage in the equipment specified by the contract.

D. COMMUNICATIONS EQUIPMENT: The Contractor shall provide and maintain in operational condition the following communications equipment in each furnished aircraft and shall be of types currently approved by the FCC and FAA:

1. VHF COMMUNICATIONS - The spray aircraft and observation aircraft (Lot #3 only) shall be equipped with operating VHF (FAA frequencies) communication systems. A minimum of 360 crystal-controlled receiving and transmitting channels shall be provided. Other channels shall include the tower and ground control frequency most often used in the area of operation.
2. CHANNELS: Channels must include 163.100 MHZ (required for Lot #3) and 122.800 MHZ, 122.850 MHZ, 122.900 MHZ, 122.950 MHZ, 123.45 MHZ, or any other channel that is mutually agreed upon by VDACS and contractor for Lot #1 and Lot #2.

Air to ground communication must occur between application aircraft and VDACS or locality personnel prior to and at the conclusion of treatment in each block for Lot #1 and Lot #2. Air to ground communication between observation aircraft and VDACS must occur every fifteen minutes for Lot #3.

3. GROUND CREW COMMUNICATIONS - Each ground support crew must be equipped with a mobile or portable VHF transmitter/receiver that will permit communication with the spray aircraft.

E. NAVIGATIONAL AIDS: The Contractor shall provide Differentially Corrected Global Positioning System (DGPS) for aircraft guidance and tracking in all application aircraft. The DGPS system used on this project must be compatible with U.S. Forest Services' SprayAdvisor extension software. Certain electronic guidance systems may not meet program requirements. **Make and model of DGPS to be used must be designated on the pricing schedule of this bid.**

Guidance systems must meet the following criteria:

1. Aircraft Guidance
  - a. Differentially Corrected Global Positioning System (DGPS) with software designed for parallel offset in increments equal to the assigned swath width of the application aircraft. A course deviation indicator (CDI) or a course deviation light bar must be installed on

the aircraft and in a location that will allow the pilot to view the indicator with direct or peripheral vision without looking down. Differential correction must be provided by a portable differential station, FM radio fixed towers, or satellite. The differential correction signal must cover the entire project area.

- b. The guidance system being used shall allow the flight log to be downloaded to a VDACS and/or locality on-site airport/heliport based computer for post-flight analysis and review. The flight log must show the entire flight of the aircraft from takeoff to landing and differentiate between spray-on and spray-off when viewed on the computer monitor. The software must have the capability to zoom to any portion of the flight for viewing in greater detail and a method to determine distance between each flight lane. The system must be able to calculate and show total acres treated during the flight. The software must be compatible with dot matrix, color inkjet or laser printers and differentiate between spray-on and spray-off on the printed copy.
- c. The DGPS proposed must have been used operationally in a similar type aerial application program. Provide names and phone numbers of previous clients to validate the DGPS capabilities and include them in the references on Attachment A.
- d. Pilot proficiency or evidence of prior experience with the proposed system must be demonstrated to VDACS.
- e. If at any time the DGPS unit is not working properly, the pilot must report this to the Program Coordinator. If the DGPS is not working properly during an application, the pilot must return immediately to the airport/heliport.

2. Electronic Guidance and Support Furnished by the Contractor:

- a. Contractor shall furnish all guidance equipment, materials, personnel, and services required for the system to be used. The guidance equipment shall be capable of accurately guiding the aircraft, while flying at application altitude, along parallel flight lines equal to the assigned swath width of the application aircraft in blocks designated by VDACS. The system shall be sufficiently sensitive to provide immediate deviation indications and sufficiently accurate to keep the aircraft on the desired flight path. The guidance system shall be capable of updating current position at a rate of five (5) times per second.
- b. All equipment must be installed in accordance with an STC or a FAA-one-time field approval and FAA Form 337 by a qualified and licensed A & P mechanic/inspector.
- c. Differential correction coverage for the complete operation area.

During operation, the differentially corrected signal must be accurately recorded at least 90% of the operational time.

- d. Contractor shall provide a post-flight processing computer and software capable of displaying track, altitude and ground speed of aircraft during flight, with differentiation between standard flight and flight when the application system is on/off. Export file format must be compatible with Arcview GIS system and must be on a standard High-Density 1.44 MB 3.5 inch floppy disk or other mutually agreed-upon data storage medium.
- e. Contractor shall instruct VDACS personnel in the use of the post-processing software and provide complete operation manuals.
- f. Contractor shall provide full 24-hour on-call equipment service and operator support.
- g. Contractor shall be responsible for all related equipment shipping and Contractor personnel travel costs.

3. Tracking and Guidance System Technical Requirements:

- a. Precision DGPS guidance with pilot-selected cross-track error readout adjustable down to three (3) feet.
- b. Easy to operate, user-friendly pilot control keypad, with swath advance and decrement function.
- c. Visual display monitor capable of displaying swath width over flight path. Must be mounted in aircraft in a location that will allow the pilot to view the screen with direct or peripheral vision without looking down; must display in real time or be available for in-flight access immediately after application has ceased.
- d. Variable swath width entry.
- e. Record logging at a minimum rate of one-second intervals. Full record includes position, time, altitude, speed, track, application system on/off, flow rate, aircraft number, pilot, job name or number, and differential correction status.
- f. System memory capable of storing up to 8 hours of continuous flight log data.
- g. Capability to accept pre-loaded reference way points (A-B Line). Must be able to store and retrieve, in-cockpit, at least 50 individual treatment blocks, each containing up to 50 points. Capability to link blocks together for combined treatment.
- h. Feature which alerts pilot when aircraft is about to enter or exit a

specific treatment block or an exclusion area within a block. A method to display nested polygons to indicate sensitive, or no-spray areas within treatment blocks.

- i. HOME navigational feature which provides instant range and bearing to home base airport or heliport.
  - j. MARK feature which allows the pilot to return to a point in any swath before or after equipment shutdown.
  - k. Warning method to indicate DGPS or Differential Correction failures.
  - l. Pilot-adjustable intensity lighting for light bar, keypad, and moving map display.
  - m. Capability to end log files, rename, and start new logs in flight.
  - n. Automatic flow control to provide a constant insecticide flow rate and recorded at one-second intervals one aircraft's DGPS flight file (reference Section III, Paragraph C, Item 6).
4. Treatment Site Information Furnished by VDACS:  
VDACS will provide the Contractor outlined treatment blocks on 1:24,000 scale USGS quadrangle maps. VDACS will also provide digitized spray blocks in a shape (\*.shp) file format exported in map datum NAD83.
5. Technical Information:  
The AgNav and Satloc guidance systems meet the criteria specifications listed in this IFB. There may be other guidance systems available which also meet the required criteria but VDACS does not have that information.

- F. AIRCRAFT COMPLIANCE, CALIBRATION, CHARACTERIZATION AND DGPS DEMONSTRATION: Approximately two weeks prior to the scheduled start of the aerial application, weather and schedule permitting, a representative of VDACS and/or USDA-Forest Service will meet the Contractor at a location mutually agreed upon by VDACS and the Contractor to verify the compliance of the aircraft, spray systems, and other support equipment with the contract specifications. At this time, calibration and characterization will be conducted. Once a spray system has been calibrated and characterized, the spray system and boom will be marked by VDACS to assure that the same spray system and boom arrive on the project. The Contractor shall agree to accept the assigned swath width listed in Attachment F. A performance demonstration of the DGPS system being used shall also be conducted at this time. VDACS will set up a mock treatment block to demonstrate aircraft, pilot, and installed DGPS system use proficiency. Calibration and characterization checks will be made using water. It is the Contractor's responsibility to provide the water used in calibrating and characterizing the aircraft.

The rate of discharge from the spray system will be monitored periodically during

the spray operation (by use of the required digital spray timer) as a check on the application rate per acre.

Any costs incurred or anticipated by the Contractor for the calibration, characterization, and DGPS demonstration shall be included in the bid submission.

- G. GROUND SUPPORT EQUIPMENT: The Contractor shall furnish the following minimum ground support equipment in sufficient quantities to adequately support the aerial spraying application:

1. FIELD TRUCKS

- a. LIGHT DUTY TRUCK - The Contractor must supply a vehicle for the ground crew to use for transporting personnel, moving insecticides, running for parts, and similar duties. If the Contractor-provided nurse truck is unsuitable for conducting these errands in an expeditious manner, the Contractor must provide a pick-up truck or other acceptable vehicle. VDACS owned vehicles shall not be used for these purposes.
- b. NURSE TRUCK - A truck equipped for transporting and holding water and insecticide shall be required for the base of operation (airport/heliport). The nurse truck must be capable of legally carrying sufficient insecticide and water to supply the aircraft working from it so that spray operations are not impeded.

The nurse truck must be capable of drafting water a vertical distance of at least ten (10) feet. The truck must be equipped with a non-collapsing hose, an anti-siphon device or check valve, a coarse screen, and a bucket. The configuration must be such that water being taken into the truck is strained and metered.

If *Btk* is being supplied in drums, each truck must be supplied with drum wrenches. Truck and trailer combinations are acceptable when they meet all requirements of the Virginia Department of Transportation (VDOT).

All nurse trucks and/or insecticide holding tanks must be located so the insecticide is conveniently and readily accessible for transfer into the application aircraft at all airport/heliport sites.

- c. FUEL TRUCK - The fuel truck(s) shall be capable of transporting fuel over rough mountainous forest roads and to carry sufficient fuel to operate the application aircraft for a minimum of one (1) full spray day of eight (8) hours.

Fire extinguisher(s) shall be available and mounted on each truck in a manner so as to be readily available at all times and shall be rated as follows:

- i. Fuel truck capacity less than 750 gallons-Rated 20-B
- ii. Fuel truck capacity more than 750 gallons-Rated 40-B
- iii. Each fuel truck shall have placarded signs according to VDOT regulations.
- iv. Fuel tanks shall be securely fastened to the truck bed and shall have a sump or sediment settling area of adequate capacity to provide uncontaminated fuel to the filter and equipped with a sump drain valve at the lowest point. This sediment container shall be checked at the beginning of each spray day for contamination.
- v. All fuel used shall be commercial grade aviation fuel.

## 2. TANKS

- a. All tanks used to transport insecticides must be leak-proof and corrosion-resistant. Filler openings and air vents must be adequate to prevent surging during filling.
- b. All tanks must be equipped with properly fitted, **lockable** covers or hatch plates and kept closed except when filling or circulating to reduce foreign material contamination.
- c. All tanks must be thoroughly cleaned and free of rust, residues and particulate matter such as grit and sand. All tanks will be inspected by VDACS and/or USDA-Forest Service before being permitted to be filled with insecticide.
- d. All tanks used to carry insecticide must have visual calibration markings or a dipstick calibrated at 25 gallons or finer intervals for use as a double check.

## 3. PUMPS

- a. The pump used for loading must produce a sufficient flow rate to fill the aircraft it supplies in a maximum of three minutes without producing high pressure.
- b. The pump used for drafting the undiluted insecticide from a 55-gallon drum must be capable of repeatedly emptying a drum in less than three minutes.
- c. The same pump may be used for these two purposes providing the requirements are met.
- d. No high pressure piston pumps and no hand pumps shall be permitted.

- e. Anti-siphoning device or foot valve shall be installed on the pump system to prevent back flow.

#### 4. METERS

- a. All meters must meet the commercial requirements of Handbook-44 of the National Institute of Standards and Technology, and be certified by either the Contractor's State Weights and Measures Division, or VDACS Office of Product and Industry Standards. The Contractor should contact either his state's Office of Weights and Measures Division or VDACS Office of Product and Industry Standards (Telephone:804-786-2476) to find out specific commercial requirements of Handbook-44. If certification is conducted outside of Virginia, the Contractor must supply VDACS with a copy of the certification report. This report must be in the VDACS office within ten (10) days after notification of award of the contract.
- b. All meters must be calibrated with water by a licensed inspector within 60 days prior to start of the spraying.
- c. The meter must be capable of safely handling the flow rate necessary for loading the aircraft.
- d. Meters with lighted digital displays that are difficult to see in direct full sunlight are not acceptable.
- e. Calibrating Meters for *Btk* and Gypchek:  
  
Due to the difference in the specific gravity of water and undiluted *Btk*/Gypchek, meters must also be calibrated while dispensing *Btk* and Gypchek, to determine accurate gallonage. In general, pumps dispense 4-7% less gallonage of Gypchek and undiluted *Btk* relative to a fixed amount of water.
- f. Water will be used when calibrating meters for Dimilin.

#### 5. STRAINERS

- a. An in-line strainer must be located prior to the intake of the meter. This strainer may be on either side of the pump.
- b. The strainer elements used to screen the insecticides must be of 30-mesh size for *Btk* and Gypchek; 50-mesh size for Dimilin. The strainer must fit properly into the strainer housing.
- c. Strainer may be removed only at the discretion of VDACS or USDA-Forest Service.

#### 6. PLUMBING

- a. Hoses shall be a minimum of 100 feet long with Camlock-type fittings.
  - b. Quick-connect couplings shall be required on all hoses.
  - c. Dry-break shut-off valves shall be required on all hoses to reduce leaks and spills.
- H. GROUND SUPPORT PERSONNEL: The Contractor shall furnish a sufficient quantity of trained and qualified personnel to drive, operate, and maintain all ground support equipment and aircraft, plus the loading of insecticides. All ground support personnel must be equipped and trained to take proper action in an emergency. Ground support personnel must observe standard safety precautions in handling the insecticides and refueling the aircraft. Providing personnel with no applicable training or no applicable prior experience will not be permitted. The Contractor shall be required to replace any ground support personnel who do not demonstrate the knowledge and capability of performing their duties. All personnel who are mixing or loading insecticide must have a Virginia Registered Technician Certificate issued by VDACS Office of Pesticide Services. Questions regarding the Registered Technician Certificate may be directed to the VDACS Office of Pesticide Services (804) 786- 3798.
- I. PROJECT SUPERVISOR: The Contractor shall designate one of their personnel on the job to act as Project Supervisor, representing the company in all contractual matters that require prompt attention. The designated Project Supervisor must not be assigned to handle duties of concurring contracts while assigned to handle the duties of this contract. The Project Supervisor shall delegate his authority in the event he/she becomes unavailable. VDACS must be notified of any delegation of authority before it takes effect. Name of Project Supervisor must be submitted to VDACS at Pre-Treatment Conference (Section III, Paragraph N).
- J. MAINTENANCE: The Contractor shall provide all maintenance on the spray system, aircraft, mixing and pumping system, trucks, storage tanks, and other furnished equipment. Care should be taken to prevent leakage of spray material at all times. Routine maintenance must be conducted at times that will not interfere with the scheduled spray operation. Non-scheduled maintenance may be conducted, but not interfere with spray operations for longer than a period of one hour.
- K. SECURITY: The Contractor shall agree to conduct operations in a manner that will provide for a safe and secure spray project. The contractor must furnish security personnel, as state below, and cost of security personnel must be included in per acre bid price. The Contractor may furnish additional security, if desired, to protect Contractor-owned/leased aircraft, equipment and vehicles at no additional cost to VDACS. VDACS will assume no responsibility for any damage or loss to Contractor-furnished items.
  - 1. SECURITY PERSONNEL: Security personnel will be required at loading zones which do not have the facilities or personnel to adequately protect

application equipment. VDACS, at its sole discretion, will evaluate loading zones submitted by Contractor and determine if security personnel are required. If VDACS determines that additional security is required, Contractor will provide, at no additional cost to VDACS, personnel to provide security from one-half hour before sunset until one-half hour after sunrise each day. Protecting equipment through the use of security personnel provided by Contractor must begin when equipment arrives at the loading zone and continue until spray project is complete or moves to a loading zone with adequate security. Security personnel shall be responsible for ensuring that equipment and insecticides are not contaminated during non-operational periods. Name(s) of security personnel must be submitted to VDACS at Pre-Treatment conference (Section III, Paragraph N).

2. DISABLING AIRCRAFT: Aircraft must be disabled at the conclusion of spray operations each day in a manner that will prevent aircraft from being started.
  3. SECURITY SEALS: Aircraft hopper, water tanks, and insecticide tanks must be sealed with a VDACS numbered seal at termination of spray activities each day. Seals will be furnished by VDACS. Verification of seal placement is the responsibility of the Contractor and VDACS. A broken seal is an indication of tampering and may result in suspension of spray activities for a period of approximately ten days.
  4. LOCKS: Locks must be placed on all water and insecticide tanks when the applicator is traveling from one loading zone to another.
  5. FLUSHING: Aircraft hopper, spray booms, empty water tanks and empty insecticide tanks must be flushed prior to arriving at loading zone for first treatment.
  6. INSECTICIDE: Documentation must accompany shipments of *Btk* that verify the chain of custody of *Btk* from manufacturer to Contractor. *Btk* must arrive at loading zone from manufacturer with all container openings sealed with individually numbered seals. Dimilin and Carrier 038A must arrive at loading zone in original containers with seal intact. Insecticide that arrives with improper or broken seals will not be accepted and must be replaced by Contractor. Liquidated damages will be assessed for insecticides arriving with improper or broken seals (reference Section VII, Paragraph I).
  7. BACKGROUND CHECKS: VDACS may conduct background checks on pilots and ground personnel working on this spray project. Pilots and all ground support personnel must complete and return any background data information forms to VDACS by April 1. These forms will be provided by VDACS after the award.
- L. SPRAY MATERIAL: The Contractor shall be responsible for the purchase of the *Btk*, Dimilin, and 038A Carrier used in this program. The Contractor shall be

responsible for handling and transporting the insecticide and carrier from any storage site to the aircraft base of operation. The Contractor must also supply all labor to load and mix (when applicable) the insecticide. A Material Safety Data Sheet for the insecticide must be at each loading site. Applicators shall determine what, if any, operational problems exist with any product. Such problems might include handling, storage, transportation, and spraying properties. The Contractor shall be responsible for ensuring a trouble-free operation with the material purchased.

The Contractor shall be responsible for the proper disposal of all applicable hazardous material containers. All insecticide containers must be triple rinsed before disposal. The rinsate must be disposed of in an appropriate manner.

All insecticide shall be properly stored, as specified on product label when not in use. The storage area must be clearly marked that it contains pesticides. *Btk* shall be stored out of direct sunlight in a cool area (34° - 90° F). Acceptable formulations and pertinent information about the insecticides is given below. The Contractor shall be responsible for obtaining all water used in spray mixtures and cleaning of equipment.

1. ***Btk* OPERATIONAL SPECIFICATIONS:**

- a. **GENERAL** - All *Btk* products purchased for use on this project must be new material manufactured within six months of date of application. Proper documentation of its manufacture date shall be available on-site for review. Foray 76B aqueous formulations must be procured and used by the Contractor for this project. **The Contractor must provide, at the time of bid submission, the current *Btk* formulation label and Material Safety Data Sheet for the *Btk* specified for this contract.**
- b. **APPLICATION RATE** - *Btk* shall be applied undiluted at a rate of 38 BIUs (64 oz. or ½ gallon) per acre or 25.3 BIU's (42.6 oz. or 1/3 gallon) per acre. See Table 1 for details on acreage, rate, and number of applications for each lot. The *Btk* application shall be made when 50% of the gypsy moth larvae are in second instar stage and oak leaves are 30% developed.
- c. **MIXING PROCEDURES** - The Contractor shall be responsible for any agitation of *Btk* recommended by the manufacturer to maintain uniform consistency. The Contractor must follow all manufacturer recommendations for agitation of the *Btk* to avoid air in the formulation. No sticker shall be used with this product. Application equipment must be rinsed and flushed following each day's spraying. This is necessary to prevent drying of spray material overnight or during no-spray days.
- d. **PRODUCT SUPPLIERS** - Technical information and price quotes for this product may be obtained from the direct sales manufacturing representative shown below. There may be other sales representatives, but VDACS does not have that information.

Foray 76B  
Stephen Nicholson  
2704 Orser Road  
Elginburg, Ontario  
Canada K0H 1M0  
Phone (613) 376-1070  
FAX: (613) 376-1069

2. DIMILIN OPERATIONAL SPECIFICATIONS:

- a. GENERAL - Dimilin 4L or Dimilin 25W shall be procured and used by the Contractor for this project. **The Contractor must provide, at the time of bid submission, the current Dimilin formulation label and Material Safety Data Sheet for the Dimilin specified for this contract.**

Dimilin shall be applied when oak foliage is 20% developed.

- b. APPLICATION RATE – All Dimilin will be applied in a single application.

Dimilin 4L - a liquid formulation containing 40% active ingredient, shall be applied at a rate of one fluid ounce of product (.03 lb. or .4 oz. AI) in 127 ounces of water per acre.

Dimilin 25W - a wettable powder formulation containing 25% active ingredient, shall be applied at a rate of 2 ounces of product (.03 lb AI) in 128 ounces of water per acre.

- c. MIXING PROCEDURE - Dimilin spray solution must be agitated in a mixing tank and then pumped directly into the aircraft spray tank. Water used in solution may be chlorinated or non-chlorinated.
- d. PRODUCT SUPPLIER - Technical information and price quotes for this product may be obtained from the direct sales manufacturing representative shown below. There may be other sales representatives for this insecticide, but VDACS does not have that information.

Dimilin 4L & Dimilin 25W  
Ed Ruwet  
Chemtura Crop Protection  
7210 North Division Street  
Auburn, NY 13021  
Phone: (315) 252-9495  
FAX: (315) 258-9437

3. Gypchek OPERATIONAL SPECIFICATIONS (Lot #1 only):

- a. GENERAL - Gypchek used on this project will be manufactured by USDA-Forest Service and supplied by VDACS. Carrier 038A must be purchased by contractor for use on this project (Lot #1 only) from Omnova Solutions. **The Contractor must provide, at the time of bid submission, the current Carrier 038A formulation label and Material Safety Data Sheet.**
- b. APPLICATION RATE - Gypchek shall be mixed with 038A Carrier at a rate of  $2 \times 10^{11}$  OB/acre in 128 ounces of water per acre. Two applications of Gypchek must be applied approximately three (3) days apart (see Table 1 for details on acreage, rate, and number of applications). Gypchek application shall be made when gypsy moth larvae are in first or second instar stage and oak leaves are 20% developed.
- c. MIXING PROCEDURES - The Contractor shall be responsible for any agitation of Gypchek recommended by the 038A Carrier manufacturer and USDA-Forest Service to maintain uniform consistency. The Contractor must follow all manufacturer and USDA-Forest Service recommendations for agitation and mixing of the Gypchek to avoid air in the formulation. No sticker shall be used with this product. Application equipment must be rinsed and flushed following completion of Gypchek applications.
- d. PRODUCT SUPPLIERS - Technical information and price quotes for Carrier 038A may be obtained from the direct sales manufacturing representative shown below.

038A Carrier  
Don Elmore  
Omnova Solutions  
Chester, SC  
Phone: (803) 377-2204.

- M. LOADING SITES: The selection of suitable heliports or airfields for use as loading sites shall be the sole responsibility of the Contractor. VDACS will assist the Contractor in pre-selecting suitable airport/heliport sites. **The Contractor must locate and secure permission for all heliports or airfields prior to the start of the project and be prepared to provide evidence of such permission to VDACS by April 1.** The Contractor shall be responsible for any damage to the loading sites and restitution or repairs made to the owner(s) prior to payment of final invoice. All loading sites must receive prior approval from VDACS.
- N. PRE-TREATMENT CONFERENCE: At a time, date, and location agreeable to all parties, and prior to the scheduled start of the aerial application, representatives of VDACS, the locality (Lot #1 and Lot #2), USDA-Forest Service, and the Contractor shall meet and discuss the aerial application program. Topics for discussion shall include, but not be limited to, the handling, mixing, and application of the insecticide; aircraft capabilities; final selection of airport sites; safety precautions, etc. **VDACS recommends that the Contractor require all pilots that will be participating in this project attend this conference.**

- O. EVALUATION AND PLANNING MEETINGS: Pilots must attend evaluation and planning meetings following each treatment session to review and evaluate the previous treatments. Planning and scheduling for the next treatment session will also be discussed.
- P. CONGESTED AREA FLIGHT PLANS: The Contractor shall be responsible for all congested area flight plans.
- Q. AERIAL APPLICATION TIME FRAME: It is estimated that the aerial application will begin on or about April 15, 2007, and will conclude no later than June 25, 2007. It is possible that the starting and ending dates could be seven (7) to ten (10) days earlier or later than these dates. Weather conditions which influence insect hatch and tree foliage development will be the deciding factor in determining the specific starting date. The Contractor will be given at least two (2) days advance notice of the specific starting date. **Treatments in Lot #2 and Lot #3 may occur over a prolonged period of time due to the mountainous terrain and the resulting variation in elevation that will affect egg hatch and leaf development. Bidders should take this into consideration when preparing bids.**
- R. AREAS TO BE TREATED
1. The area to be treated:

Lot #1: City of Alexandria and Fairfax County: Consists of approximately 4,356 acres  $\pm$  10%. Thirty-two (32) separate spray blocks will be treated (Attachments G & H).

Lot #2: Counties of Clarke, Frederick, and Prince William. Consists of approximately 7,790 acres  $\pm$  10%. Thirty-seven (37) separate spray blocks will be treated (see Attachments G & H).

Lot #3: Counties of Bland, Craig, Giles, Pittsylvania, Pulaski, Roanoke, and Wythe. Consists of approximately 17,554 acres  $\pm$  10%. Twenty-four (24) separate spray blocks will be treated (see Attachments G & H).
  2. Prospective Bidders may inspect a detailed spray block map in the VDACS Office at 102 Governor Street, Room LL55, Richmond, Virginia (Telephone: 804-786-3515). This map may be reviewed during regular workdays between 8:15 a.m. and 4:30 p.m. Please call in advance to schedule an appointment. Copies are not available for distribution or removal from the office. Bidders are strongly encouraged to review this map prior to bid submission.
  3. A detailed spray block map will be provided to the Contractor by VDACS prior to any scheduled aerial application.

#### IV. AERIAL APPLICATION PROCEDURES

- A. START TIME: The Contractor shall have all aircraft equipment, pilots, and ground

support personnel on the job site at least 30 minutes prior to the start of the daily scheduled operation.

- B. WEATHER RESTRICTIONS: The VDACS Program Coordinator, or his designated representative, during the day-to-day administration of the contract, will determine when spraying operations will be prohibited. Information supplied by the field crews and the pilot is used in making these decisions. The following spray area conditions are used as guidelines in halting spray operations:
1. Wind velocity exceeding ten (10) miles per hour.
  2. During rainy or foggy weather, or when the foliage is dripping wet, or when there is an imminent threat (greater than 50% chance) of rain within four (4) hours for *Btk* and Gypchek applications and one (1) hour for Dimilin applications. After rain has ended, applications will resume only after foliage is dry.
  3. When air turbulence (thermal updrafts, etc.) is so great as to seriously affect the normal spray pattern.
  4. When temperatures and relative humidity conditions are such that proper insecticide application may be hindered. Generally, applications will be halted when temperatures exceed 75 degrees Fahrenheit and/or relative humidity falls below 50% for *Btk* and Gypchek applications or 60% for Dimilin applications.
- C. DESIGNATED AREAS: Application of the spray material shall be confined, as much as operationally possible, to the designated areas. In those areas which are populated, treatments shall occur as early as possible, when most people are indoors. It shall be necessary to avoid populated areas while children are waiting for buses before school and returning from school in the afternoon. Exclusion of some areas within a treatment block may be required due to environmental, animal, or human concerns.
- D. SPRAY DAYS: The intention of VDACS is to spray six days per week whenever conditions are acceptable. To avoid pilot and support personnel fatigue, every attempt will be made to have a rest day during each seven (7) day working period when the weather conditions are not favorable for spraying. This rest could fall on any day of the week. Spraying on national holidays is not permitted, unless necessary to complete the project on time as determined by the VDACS Program Coordinator. Spraying on national holidays, if conducted, may be terminated in mid-morning before recreational activities begin. Spraying in Frederick County will be prohibited May 4 - 6, 2007. The Program Coordinator or his designated representative has the prerogative to cancel or limit the amount of spraying and personnel working on overtime status.

**In residential areas, school bus schedules will play a role in determining treatment times. Bidders should take this into consideration when preparing bids.**

- E. **EVENING SPRAYING**: The primary productive spray time is in the early morning. Evening spraying is available and permitted when the weather report is favorable and where a few hours would be helpful in keeping on schedule. Evening spraying will be used when it can be very productive, such as finishing up an area and moving to a new location for the next morning's operations.

**Evening spray operations will not be automatically included in the daily spray schedule and will be performed only at the discretion of the VDACS Program Manager. Bidders should take this into consideration when preparing bids.**

Pilots flying for more than six hours in the morning may be exempt, at the discretion of VDACS, from any evening spraying that day. Pilots may request cancellation of evening spraying if it is in their judgement that Contractor personnel need a rest to ensure continued safe operations.

- F. **AIRSPEED**: An application airspeed will be assigned at the time of calibration.
- G. **HEIGHT**: No spray application shall be made lower than 35 feet over buildings. Pilots shall attempt to stay within the range of 35 to 50 feet above treetops.
- H. **APPLICATION RATES PER ACRE**: Application shall be made at the following rates:

*Btk* shall be applied undiluted at a rate of 25.3 BIU's per acre or 38 BIUs per acre (see Table 1 and Attachment G). *Btk* applied at a rate of 25.3 BIUs/acre shall be applied at 42.6 oz. (1/3 gallon) per acre. *Btk* applied at a rate of 38 BIUs/acre shall be applied at 64 oz. (1/2 gallon) per acre.

Dimilin 4L shall be applied at a rate of one fluid ounce in 127 ounces of water per acre. Dimilin 25W shall be applied at a rate of 2 ounces in 128 ounces (one gallon) of water per acre.

Gypchek (Lot #1) shall be applied at a rate of  $2 \times 10^{11}$  OB/acre/application per gallon of 038A Carrier. Two applications of Gypchek shall be made approximately three (3) days apart.

- I. **TURNS**: The spray must be shut off at the end of spray runs and during the time when a turn is being made to start another spray pass.
- J. **ACCURACY**: The spray application will be monitored for accuracy by VDACS, locality and USDA-Forest Service personnel on the ground, and by using DGPS, to ensure uniform coverage throughout the treatment block.
- K. **RECONNAISSANCE**: In accordance with FAR Part 137, a reconnaissance flight must be conducted by the spray pilot over each spray block prior to treatment to ascertain the block layout and to identify and avoid any flight hazards, congregations of people, and environmentally sensitive areas. Reconnaissance flights are provided by the Contractor and are not billed separately to VDACS.

- L. RECORDS: VDACS will maintain an accurate record of the insecticide solution metered into the aircraft and the acreage treated, which is the basis for verification of payment to the Contractor. A copy of the record, signed by the spray pilot, will be provided to the Contractor. An estimate of the amount of insecticide that is applied in unauthorized areas, or that which is jettisoned accidentally or in emergencies, will be made by VDACS and deducted from the amount properly sprayed.
- M. SPRAY BLOCK SCHEDULING: VDACS will determine the order in which spray blocks are treated each day.
- N. OBSERVATION AIRCRAFT (Required on Lot #3 only): The Contractor shall provide auxiliary aircraft as specified under Section III, Paragraph B, to serve as an observation aircraft at no additional cost to VDACS. The observation aircraft shall be able to equal or exceed the assigned application aircraft airspeed while spraying. In addition, the observation aircraft pilot(s) shall have at least **one** season's experience of piloting an observation aircraft for an insecticide treatment program in forested terrain typical of the application area. Fuel for the observation aircraft must be available at the loading site. Observation aircraft pilots must conduct pre-treatment flights of the treatment areas prior to the start of the project. This will provide the observation aircraft pilots vectors for the quickest air route to the treatment areas from the loading zone. **Information pertaining to the observation aircraft and pilots must be completed on Attachment D and submitted with the bid. Observation aircraft must use the same landing zone as treatment aircraft. During spray operations, observation aircraft pilots will report to the Program Manager at 15 minute intervals regarding spray aircraft location and status.**

## V. SAFETY REQUIREMENTS

Safety is paramount in the performance of the requirements of the contract. The Contractor shall use sound and prudent judgment to ensure the safety of all individuals, both in the air and on the ground. The following safety precautions, as a minimum, shall be observed at all times:

- A. AIRCRAFT REFUELING: Smoking during aircraft refueling shall not be permitted within 100 ft. of aircraft and fuel truck. Hot fueling under the following conditions is allowed:
  - 1. The pilot shall remain at the controls of the aircraft.
  - 2. No other persons shall be on board the aircraft during refueling.
  - 3. Strobe lights, rotating beacon lights, radios, and other non-essential electrical systems shall be turned off.
  - 4. Doors and windows on the side adjacent to the fuel port shall be closed.
  - 5. The fuel servicing vehicle shall be parked outside the safety circle.
  - 6. Upon completion of the fueling operation, the fuel nozzle shall be returned

to the service truck and the refueling hose cleared from the landing pad.

- B. PILOT RESPONSIBILITY: When in flight, the pilot shall be responsible at all times for the safety of the aircraft and personnel. VDACS will not require flying in fog, dense smoke or in any other adverse condition, which a prudent pilot would avoid. It is mutually understood and agreed, that the Contractor shall not be required to land at any site which an expert pilot would consider unsafe. Although efforts have been made to denote flight hazards on the pilot's topo maps, it is the ultimate responsibility of the pilot (under FAR 137) to identify and avoid all flight hazards in the operation area. As stated previously (reference Section IV, Paragraph K), the pilot must make a reconnaissance flight over each spray block to locate and identify any such hazards.
- C. RESERVE FUEL: A minimum of twenty (20) minutes reserve supply of fuel over the amount needed for the average round trip shall be required for each flight.
- F. LOADING: The pilot shall be responsible for the proper loading of the aircraft. Loading shall be under his direction and shall be inspected by him before takeoff with oversight by VDACS or USDA-Forest Service representatives. The takeoff weight must not exceed the maximum gross weight specified by the manufacturer under standard category. The pilot shall compensate for altitude, temperature, landing site conditions, and other adverse flying conditions.
- E. VISIBILITY: The aircraft windshield or bubble shall be kept clean.
- F. FLIGHT DUTY LIMITATIONS: Aircraft pilots shall be limited to the following flight hours:
  - 1. Flight time must not exceed eight (8) hours per day. Flight time will be calculated from take-off to landing of each flight and recorded on Daily Aircraft Record.
  - 2. Flight hours shall not exceed forty-two (42) during any six (6) consecutive day period. For each six (6) consecutive days of treatment, pilot(s) and crew must be given the seventh day off.
  - 3. Flight time is not entirely reliable as a gauge of accumulative pilot fatigue. Sound judgment is essential to maintain a high degree of safety. The pilot may request a break of thirty (30) minutes after any four consecutive hours of flight.
- G. INSECTICIDE HANDLING: The Contractor shall follow all safety precautions which apply to the specific insecticide being handled. If the insecticides are to be transported unmixed to a loading site, they shall be placed in a securely-mounted tank, or if in drums, they shall be chained to a portion of the truck bed. Insecticides must be stored as stated on the manufacturers' labels when not in use. Any leaks and/or spills shall be the responsibility of the Contractor to clean up and dispose of according to state laws and regulations. The Contractor shall be responsible for transport, storage, and handling of the insecticides.

- H. INSECTICIDE SPRAYING: The Contractor shall exercise extreme caution in spraying over residential areas. In addition, the Contractor shall not spray in any area(s) restricted by representatives of VDACS, the locality, or USDA-Forest Service.
- I. SAFETY EQUIPMENT: The Contractor shall be responsible for providing the following safety equipment during the term of the contract:
  - 1. Approved fire extinguishers of sufficient size and quantity to handle emergencies associated with this type of spray operation.
  - 2. Aeronautical first aid kits on application aircraft.
  - 3. Safety equipment required for mixing and loading the insecticide material. This includes, but is not limited to, gloves, respirators, signs, etc.
  - 4. Necessary safety equipment at the loading site(s) for cleanup of any hazardous spills. This equipment shall include 200 lbs. absorbent material, trenching shovel, and containers for possible spill material. The Contractor shall be responsible for proper disposal of hazardous spill material.
  - 5. Pilots of application aircraft and ground support personnel responsible for fueling the aircraft shall wear long-sleeved shirts and trousers (or long-sleeved flight suits) made of fire-resistant polyamide or aramide material (Ex: Nomex suits). Above-mentioned shall not wear clothing made of synthetic material, except if designated on the label as being fire-resistant. Undergarments and stockings must be 100% cotton.
  - 6. FAA-approved double-strap shoulder harness with automatic locking inertia reels for pilots and each front seat occupant shall be present on application aircraft. Shoulder straps and lap belts shall fasten with one single-point, metal-to-metal, quick release mechanism. One set of individual lap belts shall be present for each occupant.

## VI GENERAL TERMS AND CONDITIONS

- A. VENDORS MANUAL: This solicitation is subject to the provisions of the Commonwealth of Virginia *Vendors Manual* and any changes or revisions thereto, which are hereby incorporated into this contract in their entirety. The procedure for filing contractual claims is in section 7.19 of the *Vendors Manual*. A copy of the manual is normally available for review at the purchasing office and is accessible on the Internet at [www.dgs.state.va.us/dps](http://www.dgs.state.va.us/dps) under "Manuals."
- B. APPLICABLE LAWS AND COURTS: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The agency and the contractor are encouraged to resolve any issues in controversy arising from the award of the contract or any contractual dispute using Alternative Dispute Resolution (ADR) procedures (*Code of Virginia*, § 2.2-4366). ADR procedures are described in Chapter 9 of the *Vendors Manual*. The contractor shall comply with all applicable federal, state and local laws, rules

and regulations.

- C. ANTI-DISCRIMINATION: By submitting their bids, bidders certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and § 2.2-4311 of the *Virginia Public Procurement Act (VPPA)*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia*, § 2.2-4343.1E).

In every contract over \$10,000 the provisions in 1. and 2. below apply:

1. During the performance of this contract, the contractor agrees as follows:
  - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
  - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
2. The contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

- D. ETHICS IN PUBLIC CONTRACTING: By submitting their bids, bidders certify that their bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder, supplier, manufacturer or subcontractor in connection with their bid, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

- E. IMMIGRATION REFORM AND CONTROL ACT OF 1986: By submitting their bids, bidders certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.
- F. DEBARMENT STATUS: By submitting their bids, bidders certify that they are not currently debarred by the Commonwealth of Virginia from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- G. ANTITRUST: By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.
- H. MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS FOR IFBs AND RFPs : Failure to submit a bid on the official state form provided for that purpose shall be a cause for rejection of the bid. Modification of or additions to any portion of the Invitation for Bids may be cause for rejection of the bid; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a bid as nonresponsive. As a precondition to its acceptance, the Commonwealth may, in its sole discretion, request that the bidder withdraw or modify nonresponsive portions of a bid which do not affect quality, quantity, price, or delivery. No modification of or addition to the provisions of the contract shall be effective unless reduced to writing and signed by the parties.
- I. CLARIFICATION OF TERMS: If any prospective bidder has questions about the specifications or other solicitation documents, the prospective bidder should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.
- J. PAYMENT:
  - 1. To Prime Contractor:
    - a. Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the state contract number and/or purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).
    - b. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery,

whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.

- c. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price, regardless of which public agency is being billed.
- d. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.
- e. **Unreasonable Charges.** Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (*Code of Virginia*, § 2.2-4363).

2. To Subcontractors:

- a. A contractor awarded a contract under this solicitation is hereby obligated:
  - (1) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the Commonwealth for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or
  - (2) To notify the agency and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.
- b. The contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the Commonwealth, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's

obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Commonwealth.

3. Each prime contractor who wins an award in which provision of a SWAM procurement plan is a condition to the award, shall deliver to the contracting agency or institution, on or before request for final payment, evidence and certification of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the SWAM procurement plan. Final payment under the contract in question may be withheld until such certification is delivered and, if necessary, confirmed by the agency or institution, or other appropriate penalties may be assessed in lieu of withholding such payment.
- K. PRECEDENCE OF TERMS: The following General Terms and Conditions *VENDORS MANUAL*, *APPLICABLE LAWS AND COURTS*, *ANTI-DISCRIMINATION*, *ETHICS IN PUBLIC CONTRACTING*, *IMMIGRATION REFORM AND CONTROL ACT OF 1986*, *DEBARMENT STATUS*, *ANTITRUST*, *MANDATORY USE OF STATE FORM AND TERMS AND CONDITIONS*, *CLARIFICATION OF TERMS*, *PAYMENT* shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.
- L. QUALIFICATIONS OF BIDDERS: The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the bidder to perform the services/furnish the goods and the bidder shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect bidder's physical facilities prior to award to satisfy questions regarding the bidder's capabilities. The Commonwealth further reserves the right to reject any bid if the evidence submitted by, or investigations of, such bidder fails to satisfy the Commonwealth that such bidder is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.
- M. TESTING AND INSPECTION: The Commonwealth reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.
- N. ASSIGNMENT OF CONTRACT: A contract shall not be assignable by the contractor in whole or in part without the written consent of the Commonwealth.
- O. CHANGES TO THE CONTRACT: Changes can be made to the contract in any of the following ways:
1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.

2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt. The contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:
  - a. By mutual agreement between the parties in writing; or
  - b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the contractor's records and/or to determine the correct number of units independently; or
  - c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia *Vendors Manual*. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.
  
- P. DEFAULT: In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Commonwealth, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Commonwealth may have.
  
- Q. INSURANCE: By signing and submitting a bid or proposal under this solicitation, the bidder or offeror certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. For construction

contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the *Code of Virginia*. The bidder or offeror further certifies that the contractor and any subcontractors will maintain these insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

**MINIMUM INSURANCE COVERAGES AND LIMITS REQUIRED FOR MOST CONTRACTS:**

1. Workers' Compensation - Statutory requirements and benefits. Coverage is compulsory for employers of three or more employees, to include the employer. Contractors who fail to notify the Commonwealth of increases in the number of employees that change their workers' compensation requirements under the *Code of Virginia* during the course of the contract shall be in noncompliance with the contract.
2. Employer's Liability - \$100,000.
3. Commercial General Liability - \$1,000,000 per occurrence. Commercial General Liability is to include bodily injury and property damage, personal injury and advertising injury, products and completed operations coverage. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy.
4. Automobile Liability - \$1,000,000 per occurrence. (Only used if motor vehicle is to be used in the contract.)

R. **ANNOUNCEMENT OF AWARD:** Upon the award or the announcement of the decision to award a contract over \$50,000, as a result of this solicitation, the purchasing agency will publicly post such notice on the DGS/DPS eVA web site ([www.eva.state.va.us](http://www.eva.state.va.us)) for a minimum of 10 days.

S. **DRUG-FREE WORKPLACE:** During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "*drug-free workplace*" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

- T. NONDISCRIMINATION OF CONTRACTORS: A bidder, offeror, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the bidder or offeror employs ex-offenders unless the state agency, department or institution has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.
- U. eVA Business-To-Government Vendor Registration: The eVA Internet electronic procurement solution, website portal [www.eVA.virginia.gov](http://www.eVA.virginia.gov), streamlines and automates government purchasing activities in the Commonwealth. The eVA portal is the gateway for vendors to conduct business with state agencies and public bodies. All vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution either through the eVA Basic Vendor Registration Service or eVA Premium Vendor Registration Service. All bidders or offerors must register in eVA; failure to register will result in the bid/proposal being rejected.
- a. eVA Basic Vendor Registration Service: \$25 Annual Registration Fee plus the appropriate order Transaction Fee specified below. eVA Basic Vendor Registration Service includes electronic order receipt, vendor catalog posting, on-line registration, electronic bidding, and the ability to research historical procurement data available in the eVA purchase transaction data warehouse.
  - b. eVA Premium Vendor Registration Service: \$25 Annual Registration Fee plus the appropriate order Transaction Fee specified below. eVA Premium Vendor Registration Service includes all benefits of the eVA Basic Vendor Registration Service plus automatic email or fax notification of solicitations and amendments.
  - c. For orders issued prior to August 16, 2006, the Vendor Transaction Fee is 1%, capped at a maximum of \$500 per order.
  - d. For orders issued August 16, 2006 and after, the Vendor Transaction Fee is:
    - (i) DMBE-certified Small Businesses: 1%, capped at \$500 per order.
    - (ii) Businesses that are not DMBE-certified Small Businesses: 1%, capped at \$1,500 per order.
- V. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the agency shall be bound hereunder only to the extent of the funds

available or which may hereafter become available for the purpose of this agreement.

## VII. SPECIAL TERMS AND CONDITIONS

- A. PERSONNEL: VDACS will furnish state and/or local personnel to supervise and direct the spray operation. The Program Coordinator is the Program Manager of the Office of Plant and Pest Services in the Virginia Department of Agriculture and Consumer Services, or his designated representative. The Program Coordinator's responsibilities include: 1) ensuring contract compliance; 2) settling minor contractual disputes, and 3) maintaining overall authority to terminate daily treatment.

Since this is a cooperative project between VDACS, the locality (for Lot #1 and Lot #2), and USDA-Forest Service, all levels of government will be involved in the following:

1. Maintaining accurate and signed daily aircraft records.
  2. Acting as project safety officer.
  3. Working directly with the Contractor in the implementation of the project in his/her area of jurisdiction and conducting daily evaluation and planning meetings (reference Section III, paragraph O).
  4. Providing treatment area topographic maps to the Contractor.
  5. Maintaining contact with government field personnel.
  6. Providing and supervising ground field personnel and securing weather data.
  7. Conducting public relations for locality being treated.
- B. REPLACEMENT AIRCRAFT/EQUIPMENT: In the event any aircraft and/or equipment becomes incapacitated or is rejected for use by VDACS, the Contractor shall have 48 hours to repair or replace them. If equipment is to be replaced, replacement must be of the same the caliber, and if the aircraft is to be replaced, replacement must be of same category (reference Section III, Paragraph B).
- C. COLLATERAL CONTRACTS: While aircraft, equipment, pilots, crew, and ground support personnel are under contract to VDACS, Contractor shall not be permitted to perform spraying operations for another firm or individual (Lot #1 and Lot #2).

Contractor for Lot #3 will be permitted to perform spray operations for another firm or individual only during the time period after the completion of treatments in Pittsylvania County and before remaining treatments begin. Contractors that perform spray operations for other firms or individuals during this time period will be given 48 hours advance notice of date to report for remaining treatments.

Upon completion of the work, aircraft will be released by verbal consent of the Program Coordinator.

- D. SUBCONTRACTORS: No portion of the work shall be sublet to subcontractors without prior written consent of VDACS. In addition, no more than 50% of the work to be completed shall be subcontracted. In the event that the Contractor desires to subcontract some part of the work specified herein, the Contractor shall first furnish to VDACS the names, qualifications, and experiences of their proposed subcontractors. This information must be furnished to VDACS no later than 30 days prior to treatment initiation. The Contractor must also supply to VDACS, at the time of the request, all license requirements (reference Section II, Paragraph A) for the subcontractor. The Contractor shall, however, assume full liability and responsibility for the work to be done by its subcontractor(s) and shall assure compliance with all requirements of the contract.

E. ADDITIONAL INSURANCE:

Coverage is to include Premises/Operations Liability, Independent Contractor's Liability, Owner's and Contractor's Protective Liability and Personal Injury Liability.

1. Aircraft Liability--\$1,000,000 single limit for each occurrence for bodily injury and property damage.
2. Aircraft Passenger Liability -- \$1,000,000 Combined single limit per occurrence for all Bodily Injury and Property Damage (Required for Observation Aircraft only)
3. Chemical Liability--\$100,000 per person, \$300,000 per occurrence for bodily injury; \$100,000 for each occurrence/aggregate for property damage. Must include coverage for treating in residential areas.
4. Automotive Liability -- \$1,000,000 Combined single limit per occurrence for all bodily injury and property damage.
5. Airport/Premises Liability -- \$1,000,000 Combined single limit per occurrence for all bodily injury and property damage.
6. Worker's Compensation Insurance – Limits sufficient to cover all of the employees of the Contractor working to fulfill this contract.

The Contractor shall provide VDACS Purchasing Office a Commonwealth of Virginia Certificate of Insurance for his firm, and if subcontractors are used, for specified subcontractors prior to the start of any work under the contract, naming the Commonwealth of Virginia/VDACS as co-insured on all insurance policies listed.

If any work under this contract is subcontracted or performed with equipment subcontracted or leased by the Contractor, the Contractor must provide evidence that the specified liability insurance for any persons and/or equipment so subcontracted or leased is provided for under policies maintained by the

subcontractor.

A thirty-day (30) written notice of cancellation or non-renewal of the insurance policy shall be furnished by certified mail to the Purchasing Office at the address indicated on the solicitation.

**My signature on this solicitation constitutes certification that, if I am awarded the contract, I shall obtain the required coverage, as specified above and in Section VI paragraph Q, within 10 days of notification of award.**

- F. TAXES: Aircraft required to be licensed for use in the Commonwealth of Virginia are subject to a Virginia aircraft sales & use tax of 2% based upon the sale price or fair market value of the aircraft whichever is applicable. If a similar sales tax has been paid to another state, credit will be allowed if confirmation is provided. Aircraft leased, rented, or chartered are subject to these same regulations. Any required taxes must be paid before a Virginia Commercial Aircraft License can be issued. Additional information on this requirement can be obtained by contacting the Virginia Department of Taxation, P. O. Box 1115, Richmond, Virginia, 23218-1115, Telephone: 804-367- 8098.
- G. IRS FORM W-9 OR SUBSTITUTE FORM W-9: The contractor selected must properly complete and sign an IRS Form W-9 or Substitute W-9 (Request for Taxpayer Identification Number(s) and Certification). The W-9 Form must identify the applicable tax reporting status (Individual/Sole Proprietor, Corporation, Partnership, Limited Liability Corporation – LLC, etc.) and appropriate Taxpayer Identification Number (TIN) or Social Security Number (SSN) before payments can be made under this contract. A copy of the acceptable substitute W-9 is included in this proposal package (reference Attachment E). The contractor selected must submit this form to VDACS.
- H. LABELING OF HAZARDOUS SUBSTANCES: If any items or products requested by this solicitation are "Hazardous Substances", as defined by § 1261 of Title 15 of the United States Code (U.S.C.) or "Pesticides" as defined in § 136 of Title 7 of the United States Code, then the Bidder, by submitting the bid, certifies and warrants that the items or products to be used under this contract shall be properly labeled, as required by the foregoing sections and that by using the items or products, the Bidder does not violate any of the prohibitions of Title 15 U.S.C. § 1263 or Title 7 U.S.C. § 136.
- I. LIQUIDATED DAMAGES: Because of the behavior of the gypsy moth, and the amount of time available during which the aerial application must be made (estimated to be April 15, 2007 through June 25, 2007) to be successful, it is hereby understood and agreed by the Bidder, that delays caused by the Contractor during periods of acceptable spray conditions are costly to VDACS and damaging to the outcome of the program and therefore, the sums listed in the following subparagraphs will be deducted, not as a penalty, but as liquidated damages for each occurrence. Liquidated damages will not be assessed against the Contractor if delays are caused by any act, negligence, or default on the part of VDACS, public enemy, war, embargo, fire or explosion not caused by the supplier(s), riot, sabotage, or labor trouble, that results from a cause or causes entirely beyond the control or fault of the Contractor or the supplier(s). A

reasonable extension of time as VDACS deems appropriate may be granted upon receipt of a written request and justification for an extension from the Contractor. VDACS may extend the time of delay for performance of the contract at VDACS' sole discretion for good cause shown.

1. LATE ARRIVAL: Notice will be given to the Contractor at least two days in advance of a time and location to have the equipment assembled for the program start. The program start date is usually two days before actual spraying and is needed for calibration checks, final inspection, and pilot briefing. Failure to arrive on the specified day and within a reasonable period of the agreed time and day, will cause liquidated damages to be assessed against the amount due the Contractor, at the rate of One Thousand Dollars (\$1,000) per day per aircraft. This shall mean that the aircraft and its equipment, (including DGPS and communications equipment) and ground support equipment are ready and operating according to contract specifications. Arrival on time, but failure to have all the equipment on site and ready, which causes a delay in calibration checks of two hours or more, will cause liquidated damages to be assessed against the Contractor(s), at the rate of Five Hundred Dollars (\$500) per aircraft. Delays which make it impossible to properly calibrate the same day will cause liquidated damages to be assessed at One Thousand Dollars (\$1,000) per day per aircraft.
2. TARDINESS/DELAYS: The daily operation is to start 30 minutes before sunrise. The Contractor's personnel must be at the work site far enough in advance to have the treatment aircraft checked, engines warmed up and insecticide properly loaded and ready for take-off, when there is sufficient light for safe spraying. A delay in "first trip take-off" due to tardiness when conditions are acceptable for spraying will cause liquidated damages to be assessed against the amount due the Contractor at a rate of Five Hundred Dollars (\$500) per hour or portion thereof. Delays in turn-around time for fueling, pesticide loading, and maintenance during spray times as a result of insufficient number of ground personnel, materials, equipment, organization, or expertise will cause liquidated damages to be assessed against the amount due the Contractor at a rate of Five Hundred Dollars (\$500) per hour or portion thereof per each unacceptable delay incident.
3. INSUFFICIENT MATERIAL: The quantity of insecticide and aircraft fuel at the loading site must be sufficient to keep the aircraft, including auxiliary aircraft, in full production for a minimum of five hours. A shut-down caused by a lack of insecticide or fuel when spraying conditions are acceptable will cause liquidated damages to be assessed against the amount due the Contractor at the rate of Five Hundred Dollars (\$500) per incident.
4. IMPROPER SPRAYING: A uniform application at the proper droplet size and rate per acre, within the designated area, is essential for a high quality program. Where faulty application makes it necessary to respray areas not satisfactorily covered by the Contractor, such areas shall be resprayed by the Contractor, at no additional cost to VDACS for either flight time or insecticide. If the Contractor is unable to respray these areas, VDACS has the option of contracting to have these areas resprayed. The cost of

respraying shall be the responsibility of the Contractor and either deducted from the invoice submitted by the Contractor, or if the invoice has been paid, reimbursed to VDACS by the Contractor. Where faulty application results in a significant area outside the designated boundaries being treated, the Contractor will be charged for the insecticide and application cost.

5. IMPROPER MIXING: A Contractor found spraying insecticide formulations at concentrations other than prescribed in these specifications will cause liquidated damages to be assessed at the rate of One Thousand Dollars (\$1,000) per incident.
  6. POOR PILOT PERFORMANCE: The Program Coordinator reserves the right to reject any pilot, which in his opinion, violates contract rules, is unsafe, or otherwise performs unsatisfactorily. The Contractor shall be required within 24 hours to replace or furnish a pilot who is considered capable and qualified to safely fly and properly perform the application. Failure to furnish a replacement pilot within the specified time will result in an assessment against the amount due the Contractor of Fifteen Hundred Dollars (\$1,500) per day.
  7. EQUIPMENT FAILURE: It is understood that occasionally an aircraft or truck will develop a mechanical problem even with proper maintenance. No assessment will be charged to the Contractor for such a breakdown, providing the equipment can be made ready for work within 48 hours. After the 48 hour period, liquidated damages will be assessed at a rate of Five Hundred Dollars (\$500) for each hour of acceptable flying conditions not flown. If an aircraft suffers from frequent mechanical problems, the Program Coordinator reserves the right to notify the Contractor that the aircraft must be replaced with one from the same aircraft category (reference Section III, Paragraph B) within 48 hours. Failure to provide a replacement within the allotted time will result in liquidated damages being assessed against the amount due the Contractor of One Thousand Five Hundred Dollars (\$1,500) per day. Failure of the DGPS to perform as specified will result in liquidated damages being assessed against the amount due the Contractor of Five Hundred Dollars (\$500) for each day of acceptable treatment conditions the system is not used or functioning properly.
  8. PROCEDURE: Any incident in which a Contractor causes a delay, as described in this section, will be documented by VDACS and submitted to the Program Coordinator for his approval. A copy of this report will be given to the Contractor. All approved reports will be subject to the appropriate provisions and assessed liquidated damages will be deducted from payments due the Contractor.
- J. BID ACCEPTANCE PERIOD: Any bid in response to this solicitation shall be valid for 45 days. At the end of the 45 days the bid may be withdrawn at the written request of the Bidder. If the bid is not withdrawn at that time, it remains in effect until an award is made or the solicitation is canceled.

- K. AWARD: The right is reserved to make a separate award of each lot or all lots, and to make an award either in whole or in part, whichever is deemed in the best interest of the Commonwealth. The award or awards will be made to the lowest responsive, responsible Bidder or Bidders as applicable.
- L. NEGOTIATION WITH THE LOWEST BIDDER: Unless all bids are canceled or rejected, VDACS reserves the right granted by Section 2.2-4318 of the *Code of Virginia* to negotiate with the lowest responsive and responsible Bidder to obtain a contract price within the funds available to VDACS, whenever such low bid exceeds VDACS' available funds. For the purpose of determining when such negotiations may take place, the term "available funds" shall mean those funds which were budgeted for this contract prior to the issuance of the written Invitation For Bids. Negotiations with the low Bidder may include both modifications of the bid price and the Scope of Work/Specifications to be performed. VDACS shall initiate such negotiations by written notice to the lowest responsive, responsible Bidder that its bid exceeds the available funds and that VDACS wishes to negotiate a lower contract price or Scope of Work/Specifications. The times, places, and manner of negotiating shall be agreed to by VDACS and the lowest responsive, responsible Bidder.
- M. INDEMNIFICATION: Contractor agrees to indemnify, defend and hold harmless the Commonwealth of Virginia, its officers, agents, and employees from any claims, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the Contractor/any services of any kind or nature furnished by the Contractor, provided that such liability is not attributable to the sole negligence of the using agency or to failure of the using agency to use the materials, goods, or equipment in the manner already and permanently described by the Contractor on the materials, goods, or equipment delivered.
- N. AUDIT: The Contractor shall retain all books, records, and other documents relative to this contract for five (5) years after final payment, or until audited by the Commonwealth of Virginia, whichever is sooner. The agency, its authorized agents, and/or State auditors shall have full access to and the right to examine any of said materials during said period.
- O. IDENTIFICATION OF BID ENVELOPE: If a special envelope is not furnished the signed bid should be returned in a separate envelope or package sealed and identified as follows:

From: \_\_\_\_\_ March 13, 2007 2:00 p.m.  
 Name of Bidder Due Date Time

\_\_\_\_\_  
 Street or Box Number IFB Number 301:07-006

\_\_\_\_\_  
 City, State, Zip Code Gypsy Moth Aerial Spraying  
 IFB Title

Name of Contract/Purchase Officer: Wendell Powell, VCO  
Procurement Manager I

The envelope should be addressed as directed on Page 1, referencing the IFB number on the outside of the mailing envelope. The Bidder takes the risk that the envelope, even if marked as described above, may be inadvertently opened and the information compromised, which may cause the bid to be disqualified. Bids may be hand-delivered to the designated location in the Purchasing Office issuing the solicitation. No other correspondence or other bids should be placed in the envelope. Any bid received unsealed or not properly identified and inadvertently opened in the mailroom, will immediately be returned. It will be the Bidder's responsibility to resubmit the bid in the remaining time.

P. eVA BUSINESS-TO-GOVERNMENT CONTRACTS: The eVA Internet electronic procurement solution, website portal [www.eva.state.va.us](http://www.eva.state.va.us), streamlines and automates government purchasing activities in the Commonwealth. The portal is the gateway for vendors to conduct business with state agencies and public bodies. Vendors desiring to provide goods and/or services to the Commonwealth shall participate in the eVA Internet e-procurement solution and agree to comply with the following:

- a) Submit a fully executed American Management Systems, Inc., (AMS) Trading Partner Agreement, a copy of which can be accessed and downloaded from [www.eva.state.va.us](http://www.eva.state.va.us). AMS is the Commonwealth's service provider to implement and host the eVA e-procurement solution.
- b) Provide an electronic catalog (price list) for items awarded under a term contract. The format of this electronic catalog shall conform to the eVA Catalog Interchange Format (CIF) Specification that can be accessed and downloaded from [www.eva.state.va.us](http://www.eva.state.va.us). **Note: Failure to comply with the above requirements will be just cause for the Commonwealth to reject your bid or terminate this contract for default.**

## VIII. METHOD OF PAYMENT

The Contractor will be paid on the basis of invoices submitted. Invoices shall only be submitted upon completion and acceptance of the aerial application of the

contracted project area. The invoices must show the number of acres sprayed, unit price per acre, and total cost. Ten percent of the total cost will be withheld until the results of the treatment can be verified up to a maximum of 60 days.

**IX. PRICING SCHEDULE**

This pricing schedule consists of three separate lots. Lot #1 is restricted to rotary wing aircraft only. Lot #2 and Lot #3 are open to fixed wing or rotary aircraft. Bidders may bid on one or all lots (excepts as restricted above). Bidders must indicate the unit price (per acre), Total *Btk*/Dimilin/Gypchek Costs and Contract Total for all lots bid. Except for Gypchek applications, bid price must include cost of both application and insecticide. Bids for Gypchek applications must include cost of application and Carrier 038A. If a Bidder chooses not to bid on a specific lot, write the words "No Bid" on that particular lot's pricing schedule. Bidders must indicate the *Btk* formulation and DGPS make and model. The award of the contracts will be based on the lowest Contract Total bid. Refer to Section I Table 1, Section III paragraph B, and Section III paragraph Q for the treatment, number of acres, location, aircraft requirements, etc.

**LOT #1**

City of Alexandria and Fairfax County

\$ \_\_\_\_\_ Price/acre *Btk*\$ \_\_\_\_\_ Total *Btk* Cost (price/acre x 4,196 acres)

\$ \_\_\_\_\_ Price/acre Gypchek applications (includes application and carrier costs)

\$ \_\_\_\_\_ Total Gypchek Cost (price/acre x 80 acres x 2 applications)

\$ \_\_\_\_\_ Contract Total (Total *Btk* Cost + Total Gypchek Cost)*Btk* Formulation \_\_\_\_\_

DGPS Make and Model \_\_\_\_\_

**RETURN OF THIS PAGE IS REQUIRED**

**LOT #2**  
Counties of Clarke, Frederick, and Prince William

\$\_\_\_\_\_ Price/acre 25.3 BIU/acre *Btk*

\$\_\_\_\_\_ Total 25.3 BIU/acre *Btk* Cost (price/acre x 3,851 acres)

\$\_\_\_\_\_ Price/acre 38 BIU/acre *Btk*

\$\_\_\_\_\_ Total 38 BIU/acre *Btk* Cost (price/acre x 1,413 acres)

\$\_\_\_\_\_ Price/acre Dimilin

\$\_\_\_\_\_ Total Dimilin Cost (price/acre x 2,526 acres)

\$\_\_\_\_\_ Contract Total (Total 25.3 BIU/acre *Btk* Cost + Total 38 BIU/acre *Btk* Cost + Total Dimilin Cost)

*Btk* Formulation\_\_\_\_\_

DGPS Make and Model \_\_\_\_\_

**RETURN OF THIS PAGE IS REQUIRED**

**LOT #3**

Counties of Bland, Craig, Giles, Pittsylvania, Pulaski, Roanoke, and Wythe

\$\_\_\_\_\_ Price/acre 25.3 BIU/acre *Btk*

\$\_\_\_\_\_ Total Single Application 25.3/acre BIU *Btk* Cost (price/acre x 2,125 acres)

\$\_\_\_\_\_ Total Double Application 25.3 BIU/acre Btk Cost (price/acre x 7,460 acres x 2 applications)

\$\_\_\_\_\_ Price/acre Dimilin

\$\_\_\_\_\_ Total Dimilin Cost (price/acre x 509 acres)

\$\_\_\_\_\_ Contract Total (Total Single Application Cost + Total Double application costs + Total Dimilin Cost)

*Btk* Formulation \_\_\_\_\_

DGPS Make and Model \_\_\_\_\_

**RETURN OF THIS PAGE IS REQUIRED**

**XI. REQUIRED DOCUMENTS FOR GYPSY MOTH AERIAL INSECTICIDE SPRAYING FOR IFB #301:07-006**

1. Cover Sheet, Signed (Due at bid submission)
2. Pricing Schedule (Due at bid submission)
3. Attachments - Data sheets A - D (Due at bid submission)
4. FAA Aircraft Registration(s) (Due at bid submission)
5. FAA Commercial Pilot Certification(s) (Due at bid submission)
6. Dimilin Formulation Label and Material Safety Data Sheet (Due at bid submission)
7. *Btk* Formulation Label and Material Safety Data Sheet (Due at bid submission)
8. Carrier 038A Formulation Label and Material Safety Data Sheet (Due at bid submission)
9. VA Pesticide Business License (Due within 10 days of award notification)
10. VA Pesticide Applicator Certificate(s) (Due within 10 days of award notification)
  - a) Forest Pest Control - Category 2
  - b) Aerial Pesticide Application - Category 11
11. VA Commercial Aircraft License or Letter of Intent (Due within 10 days of award notification)
12. Insurance Certificates (Due within 10 days of award notification)
  - a) Employer's Liability
  - b) Automobile Liability
  - c) Aircraft Liability
  - d) Workers Compensation
  - e) Commercial General Liability
  - f) Chemical Liability

13. FAR part 137 certification (will be requested prior to work commencement)
14. FAR part 91.3 certificate of waiver (will be requested prior to work commencement)
15. Out-of-state meter certification from Contractor's State Weights & Measures Department (Due within 10 days of award notification)
16. IRS Form W-9 or Substitute W-9
17. Heliports and Airfields (Due by April 1)
18. Background Data Information Forms (Due by April 1)
19. Subcontractor Information, if applicable (30 days prior to treatment initiation)
20. Names of Project Supervisor and Security Personnel submitted to VDACS by April 15.

#### **ATTACHMENT A. CONTRACTOR DATA SHEET**

To Be Completed By Bidder and returned with bid. Attach additional sheets, if necessary.

1. QUALIFICATION OF BIDDER: The Bidder must have the capability and capacity in all respects to fully satisfy all of the contractual requirements.
2. YEARS IN BUSINESS: Indicate the length of time you have been in business providing this type of service: \_\_\_\_\_ Years \_\_\_\_\_ Months
3. MINORITY BUSINESS: Please indicate if your firm is a minority owned business:  
☐ Yes ☐ No. This information if requested for informational purposes only.
4. REFERENCES: Indicate below at least three (3) recent references for whom you have provided this type of service. Include the date service was furnished and the name and address of the person VDACS has your permission to contact.

Client/Date	Address	Contact Person's Phone Number
a.		
b.		
c.		

5. CONCURRENT COMMITMENTS: Indicate below any concurrent commitments you may have during the 2007 Gypsy Moth Spray Season. Please include description of project and contact person.

Client/Date	Address	Contact Person's Phone Number
a.		
b.		
c.		

**RETURN OF THIS PAGE IS REQUIRED**

**ATTACHMENT B. APPLICATION AIRCRAFT DATA SHEET FOR LOT # \_\_\_\_\_.**

One form must be completed for each aircraft that is anticipated to be used under any resulting contract. Write the lot number above for the specific application aircraft identified on this form. For items #10 and #11 (if not obtained by bid closing date), include a letter of intent with bid stating that these items will be obtained as stated in Section II Paragraph A or Section VII Paragraph E (for item 11). Make copies of this form if necessary.

1. Contractor Name and Address:		2. Phone Number:	
3. Aircraft Owner:		4. Location Aircraft Operating From:	
5. Aircraft/Make and Model:		6. F.A.A. Number:	
7. Airworthiness Certificate: Yes_____ No_____	8. Category:	9. Date of Annual Inspection:	
10. Virginia Commercial Aircraft License Number:			
11. Proof of Insurance Enclosed: Yes_____ No_____	12a. Spray System Pump (Type and Model):		
12b. Spray System Rate:	13. Carrying Capacity:	14. Operational Maximum Load:	
15. Boom Length:	16. Horsepower:	17. Working Speed:	

**DEFINITION OF TERMS**

Boom Length - Distance in feet between outermost nozzles. If rotary atomizer system, state type and number of atomizers.

Carrying Capacity - Total tank volume of aircraft.

Operational Maximum Load - Maximum amount of insecticide volume to be routinely used for this contract.

Spray System - Give power source (electric, wind-driven, etc) and make.

Spray System Rate - Maximum gallon/minute of delivery system.

Working Speed - Aircraft speed while spraying, in miles per hour.

**RETURN OF THIS PAGE IS REQUIRED**

**ATTACHMENT C. APPLICATION PILOT DATA SHEET**

1. Name (Last, First, Middle)	2. Address	3. City, State, ZIP Code
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**4. In the event of an Emergency, Notify**

a. Name	b. Phone Number	c. Relationship
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**5. Employer Information (Relating to VDACS Project)**

a. Name of Employer	b. Address of Employer	c. Employment: Fulltime, Seasonal, etc
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**6. Airman Certificate Information**

a. TYPE ATR____ COMM	b. Certificate Number	c. Instrument Rating Yes____ No	d. Limitations
e. Ratings (include Heavy A/C Type Ratings)			

**7. Medical Information**

a. Classification		b. Expiration Date			c. Limitations
8. Flight Information	Total (Hours)	Multi- engine (Hours)	Past 12 Months (Hours)	Experi- ence (Years)	9. F.A.R. Part 137 Certified Yes____ No____
a. Pilot (Total All Aircraft)					
b. In Type to be Flown on Contract					10. VDACS Category 02 (Forest Pest Control Certified) Yes____ No ____
c. Night Flying					
d. Instrument A1 & Hood					11. If No to 10., Have You Ever Received Reciprocity For Pesticide Certification in Virginia: Yes____ No____
e. Weight Class to be Flown on Contract					
f. Make Model & Series to be flown on contract					12. Aircraft Accidents in Last 5 Years: Yes____ No ____ (If Yes, Explain on Reverse)
g. Forest Pesticide Application in Terrain Typical of Contract					13. FAA Violations in Last 5 Years: Yes____ No____ (If Yes, Explain on Reverse)
14. I certify that as an applicator pilot I am solely responsible for the safe operation of my aircraft. This includes making a reconnaissance flight over each working area, including associated turnaround areas, to identify and locate all natural or manmade hazards or obstructions to aircraft flight. I further certify that all statements made herein are true.					
Applicant Signature		Date		Attested to by Employer	
				Date	

**RETURN OF THIS PAGE REQUIRED**

**ATTACHMENT D. OBSERVATION AIRCRAFT AND PILOT DATA SHEET**

This form must be completed for auxiliary aircraft and pilots used for observation under any resulting contract. For any item that cannot be completed include information with your letter of intent (reference Section II, paragraph B) and write under the item on this page the words "see letter of intent". Make copies as necessary.

1. Contractor Name and Address:	2. Company Handling Observation, Name and Address:
3. Observation Aircraft to be Used (Make and Model): a. b. c.	4. Speed of Each Aircraft a. b. c.
5. Aircraft Registration Number: a. b. c.	6. Date of Annual Inspection: a. b. c.
7. Pilot's Name: a. b. c.	

9. Observation Aircraft Pilot Information (Hours):				
Pilot Name	Total Hours All Aircraft	Type of Aircraft To Be Used On Contract	Night	Terrain Typical of Contract Area
a.				
b.				
c.				

10. I certify that as an observer pilot I am solely responsible for the safe operation of my aircraft. This includes making a reconnaissance flight over each working area to identify all natural or manmade hazards to aircraft flight. I further certify that all statements made herein are true.			
a. _____	_____		
b. _____	_____		
c. _____	_____		
Pilot's Signature	Date	Attested by the Employer	Date

**RETURN OF THIS PAGE REQUIRED  
(Lot #3 Bidders only)**

**ATTACHMENT E**

**VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES  
FINANCE OFFICE - INFORMATION RETURNS REPORTING  
P. O. BOX 1163, SUITE 1109, RICHMOND, VA 23218-1163**

**REQUEST FOR TAXPAYER IDENTIFICATION NUMBER AND CERTIFICATION****Substitute Form W-9**

Please return this form to the requestor within 30 days

*FAX (804) 692-0312*

**Each person or organization doing business with the Commonwealth of Virginia must provide the following information. Please return this form to the above address within 30 days of receipt.**

Check Only One:	Social Security Number	Employer Identification Number
<input type="checkbox"/> Individual	_____	
<input type="checkbox"/> Sole Proprietor	_____	and _____
<input type="checkbox"/> Partnership		_____
<input type="checkbox"/> Limited Liability Corporation		_____
<input type="checkbox"/> Tax-Exempt Non-Profit Organization		_____
<input type="checkbox"/> Corporation (specify if medical or legal)	<input type="checkbox"/> Other, please specify: _____	_____

**Enter the following:**

Legal name: \_\_\_\_\_

Trade Name: \_\_\_\_\_

Business Location Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

**Please answer the following questions:**

Is your organization (association, club, religious, charitable, educational, or other group) tax exempt under IRS Code Section 501(a) or 501(c)(3)? YES \_\_\_ NO \_\_\_

Are you a Real Estate Agent? YES \_\_\_ NO \_\_\_

Are you a minority-owned business? YES \_\_\_ NO \_\_\_

Are you a woman-owned business? YES \_\_\_ NO \_\_\_

Are you a small business? YES \_\_\_ NO \_\_\_

**Certification: Under penalties of perjury, I certify that:**

(1) The numbers(s) shown on this form is my correct taxpayer identification number(s) [or I am waiting for a number to be issued to me], and (2) The organization entity and all other information is accurate, and (3) I am not subject to backup withholding either because I have not been notified that I am subject to backup withholding as a result of a failure to report all interest and dividends, or the Internal Revenue Service has notified me that I am no longer subject to backup withholding.

You must cross out item (3) above if the IRS has notified you that you are currently subject to backup withholding because of under reporting interest or dividends on your tax return.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTACHMENT F. ASSIGNED EFFECTIVE SWATH LIST****HELICOPTERS****Category A**                      **Swath Width (ft)**

Bell 212	150
Bell 204	150
Bell 205A	150

**Category B**

Sikorsky S-55	100
Lama	100

**Category C**

Bell 206B III	100
Bell 47	100
Hughes 500	75
Hiller/Soloy 12E	75

**FIXED-WING AIRCRAFT****Category F**                      **Swath Width (ft)**

Turbine Thrush	150
Beech D-18 (with turbine)	100
Turbine Ag-cat (580 hp)	125
Turbine Air Tractor	150
Dromader M-18 (with turbine)	175

For those aircraft not listed, VDACS will establish the swath spacing.

**J. SPRAY BLOCK LIST**

<b>LOT #1</b>			
<b>Locality</b>	<b>Spray Block</b>	<b>Acres</b>	<b>Treatment</b>
Alexandria	1	80.0 (x2)	Gypchek
<b>Total - Alexandria</b>		<b>160.0</b>	
Fairfax County	1	39.94	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	2	557.69	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	3	24.55	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	4	45.90	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	5	220.23	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	6	299.94	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	7	188.76	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	8	52.25	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	9	292.48	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	10	30.74	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	11	33.80	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	12	28.79	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	13	30.89	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	14	40.84	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	15	201.70	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	16	74.45	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	17	21.04	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	18	36.75	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	19	384.73	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	20	30.13	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	21	30.19	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	22	419.74	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	23	59.13	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	24	127.86	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	25	199.58	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	26	72.85	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	27	107.11	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	28	248.92	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	29	191.09	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	30	73.93	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Fairfax County	31	29.82	<i>Bacillus thuringiensis</i> – 38 BIU/acre
<b>Fairfax - Total</b>		<b>4,195.81</b>	

Note: (x2) indicates double applications

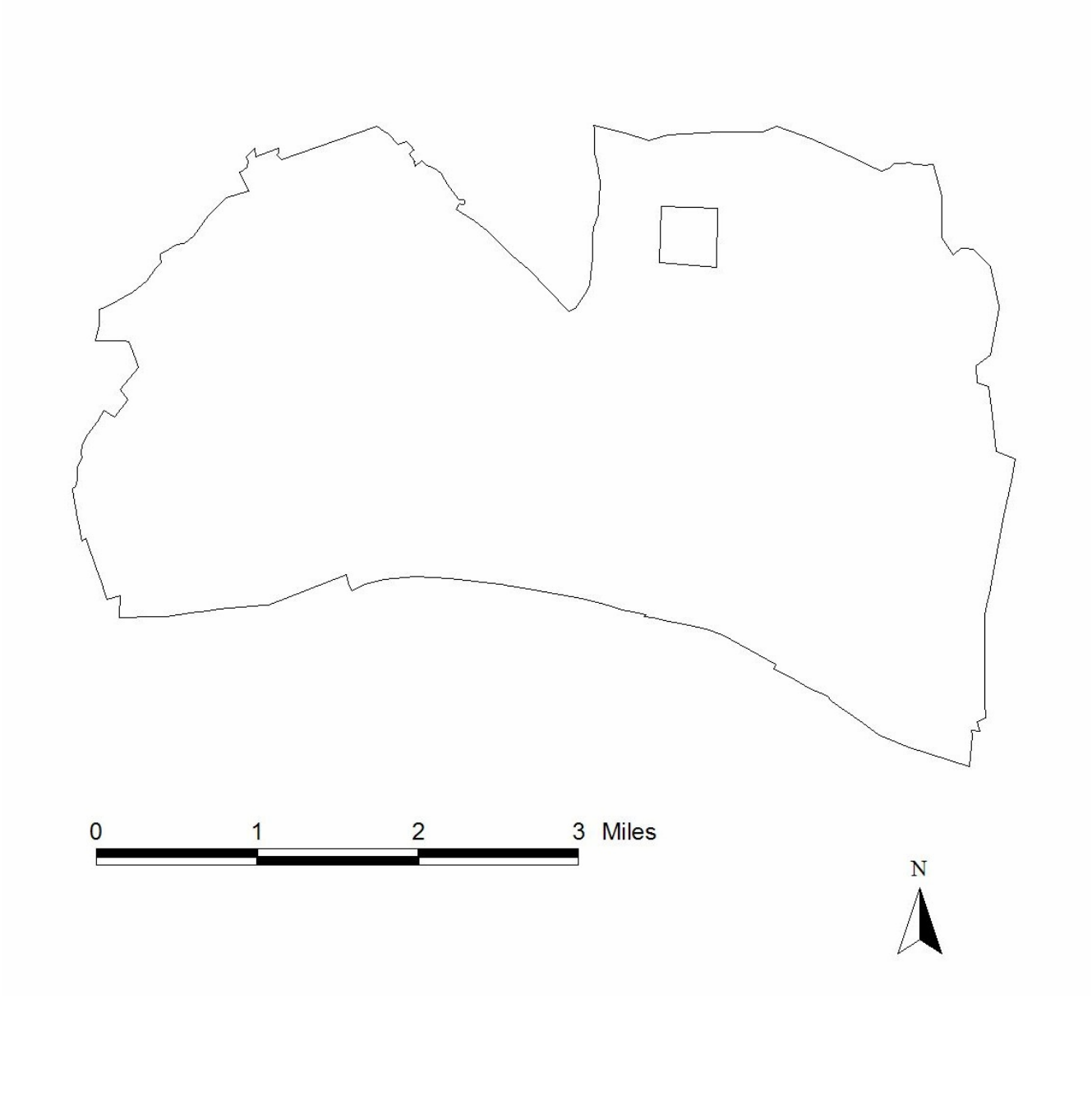
LOT #2			
Locality	Spray Block	Acres	Treatment
Clarke County	1	38.06	Dimilin
Clarke County	2	72.39	Dimilin
Clarke County	3	83.46	Dimilin
Clarke County	4	93.88	Dimilin
Clarke County	5	109.43	Dimilin
<b>Total - Clarke</b>		<b>397.22</b>	
Frederick County	1	532.30	Dimilin
Frederick County	2	46.25	Dimilin
Frederick County	3	57.75	Dimilin
Frederick County	4	71.82	Dimilin
Frederick County	5	234.49	Dimilin
Frederick County	6	49.36	Dimilin
Frederick County	7	539.48	Dimilin
Frederick County	8	47.19	Dimilin
Frederick County	9	302.56	Dimilin
Frederick County	10	330.27	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Frederick County	11	49.22	Dimilin
Frederick County	12	1,062.57	<i>Bacillus thuringiensis</i> – 38 BIU/acre
Frederick County	13	46.79	Dimilin
Frederick County	14	15.07	Dimilin
Frederick County	15	120.86	Dimilin
Frederick County	16	15.96	Dimilin
Frederick County	17	20.62	<i>Bacillus thuringiensis</i> – 38 BIU/acre
<b>Total - Frederick</b>		<b>3,542.56</b>	
Prince William County	1	1,597.82	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	3	139.16	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	4	44.68	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	5	121.69	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	6	67.99	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	7	143.72	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	8	237.79	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	9	518.61	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	10	672.98	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	11	51.72	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	13	122.18	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	15	26.80	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	16	38.72	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	17	41.81	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Prince William County	18	24.97	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
<b>Total - Prince William</b>		<b>3,850.64</b>	

LOT #3			
Locality	Spray Block	Acres	Treatment
Bland County	Mechanicsburg2	700 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Bland County	Big Bend	620 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Bland County	South Gap	400 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Bland County	Bland	1,200 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Bland County	Rocky Gap Core	1,376	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
<b>Total - Bland</b>		<b>7,216</b>	
Craig County	1	36.65	Dimilin
Craig County	2	91.40	Dimilin
<b>Total - Craig</b>		<b>128.05</b>	
Giles County	Nettle Hollow	822 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	Big Mountain A	149 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	Big Mountain B	195 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	Big Mountain C	100 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	Olean A	291 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	Olean B	870 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	White Rocks A	77 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	White Rocks B	5 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	White Rocks C	437 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	Rocky Mountain	308 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
Giles County	Fork Ridge	886 (x2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
<b>Total Giles</b>		<b>8,280.00</b>	
Pittsylvania County	Whitmell Core	360.00	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
<b>Total Pittsylvania</b>		<b>360.00</b>	
Pulaski County	Pulaski	389.00	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
<b>Total Pulaski</b>		<b>389.00</b>	
Roanoke County	1	283.85	Dimilin
Roanoke County	3	41.84	Dimilin
Roanoke County	4	55.25	Dimilin
<b>Total - Roanoke</b>		<b>380.94</b>	
Wythe County	Rural Retreat	400 (2)	<i>Bacillus thuringiensis</i> – 25.3 BIU/acre
<b>Total - Wythe</b>		<b>800.00</b>	

Note: (x2) indicates double application

H. TREATMENT AREA MAPS

City of Alexandria



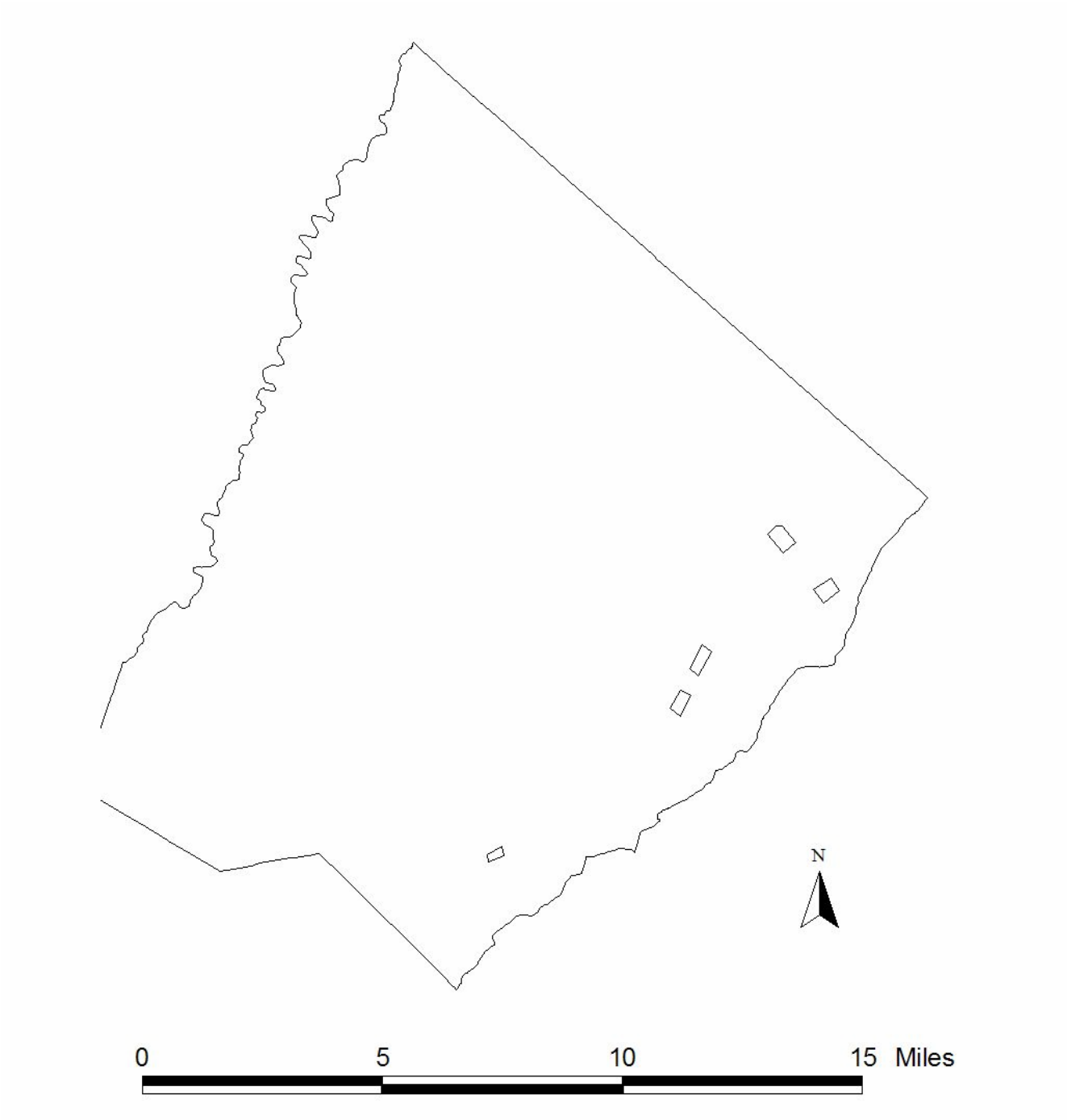
**K. TREATMENT AREA MAPS**

**Bland County**



**H. TREATMENT AREA MAPS**

Clarke County



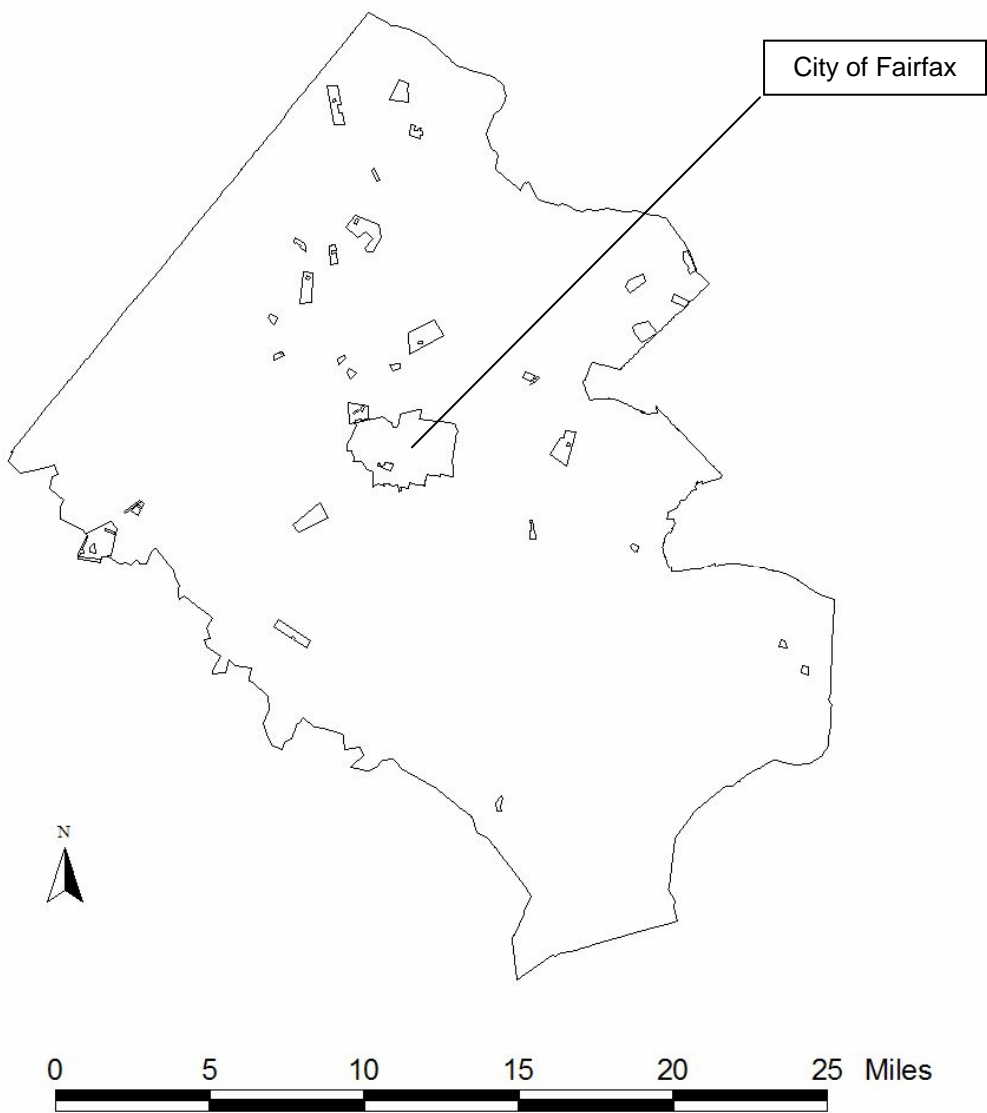
**H. TREATMENT AREA MAPS**

Craig County



H. TREATMENT AREA MAPS

Fairfax County



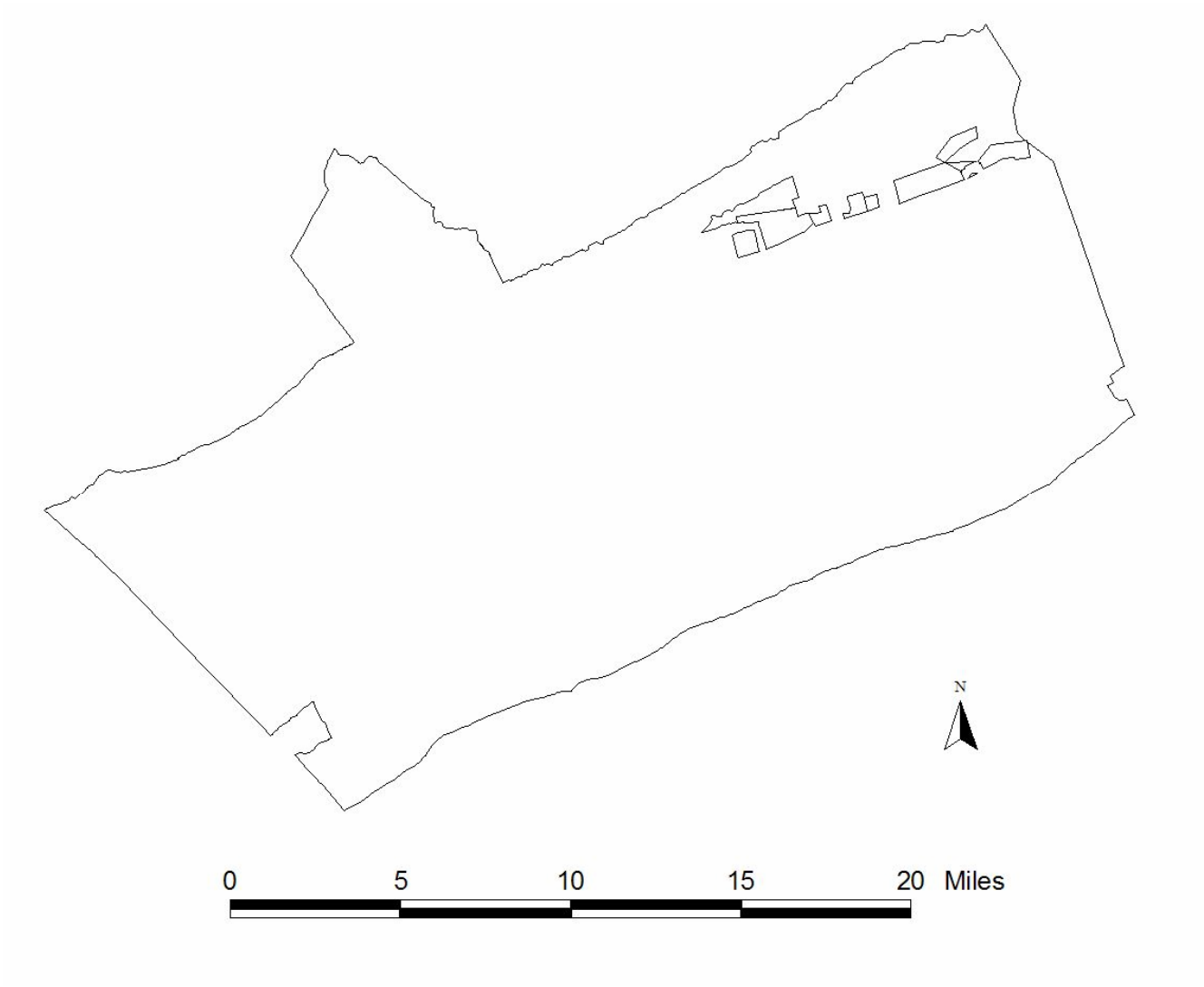
H. TREATMENT AREA MAPS

Frederick County



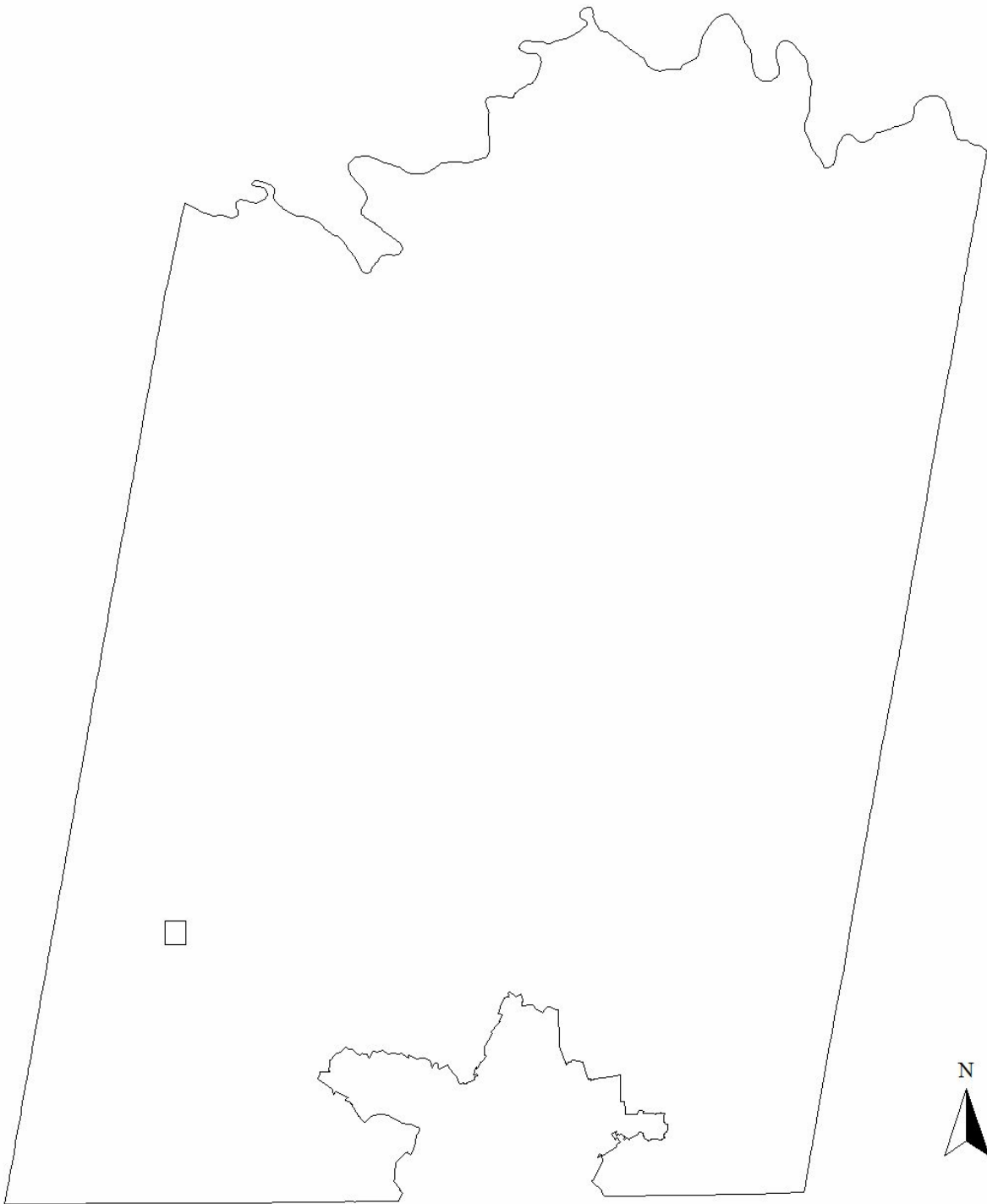
H. TREATMENT AREA MAPS

Giles County



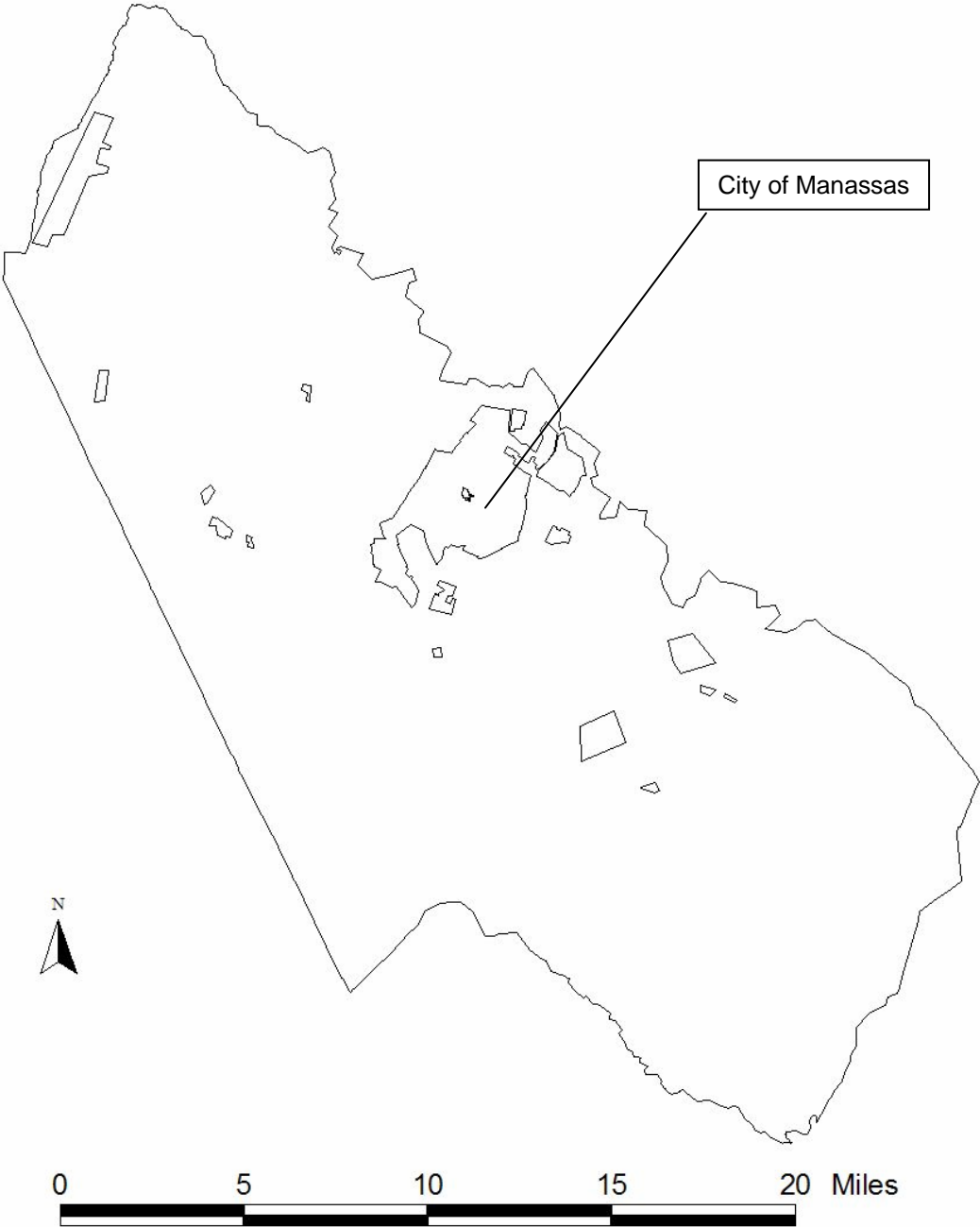
H. TREATMENT AREA MAPS

Pittsylvania County



H. TREATMENT AREA MAPS

Prince William County



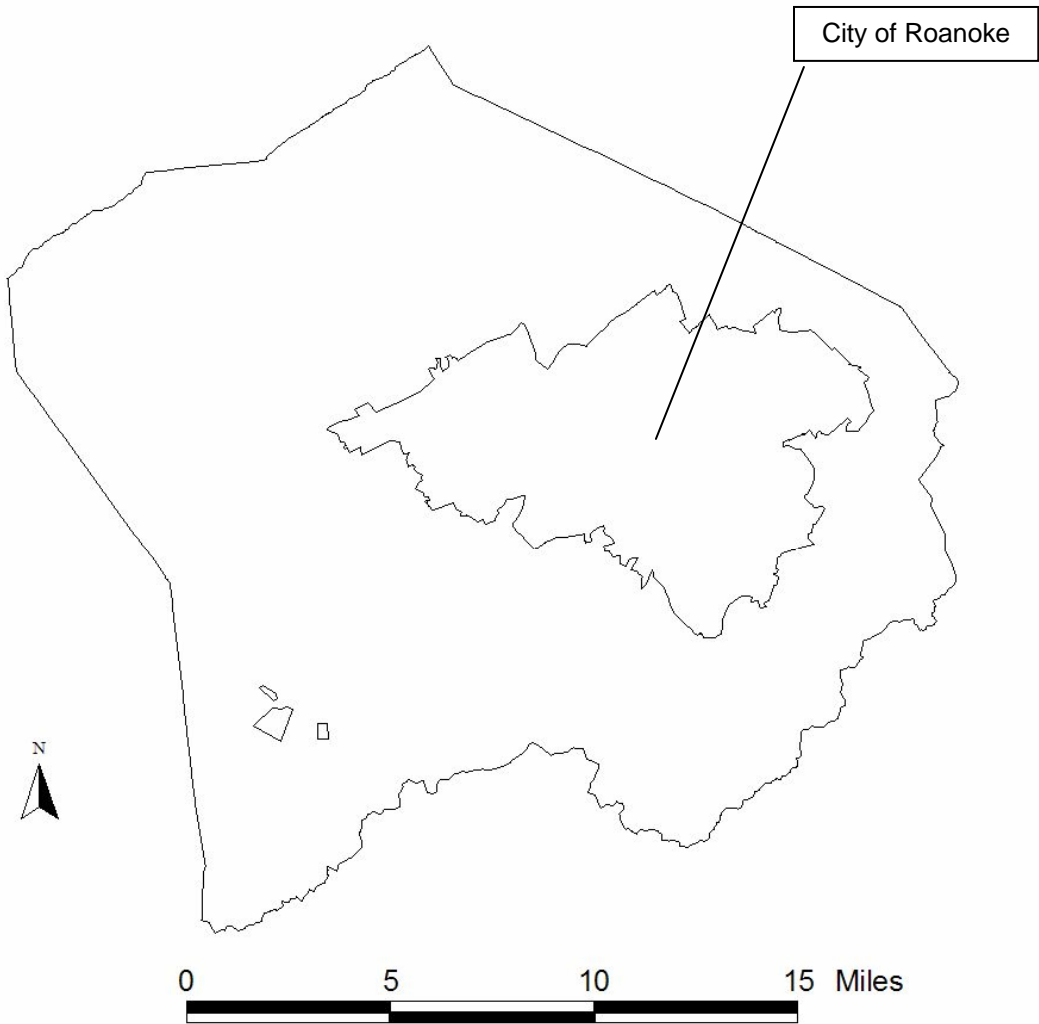
H. TREATMENT AREA MAPS

Pulaski County



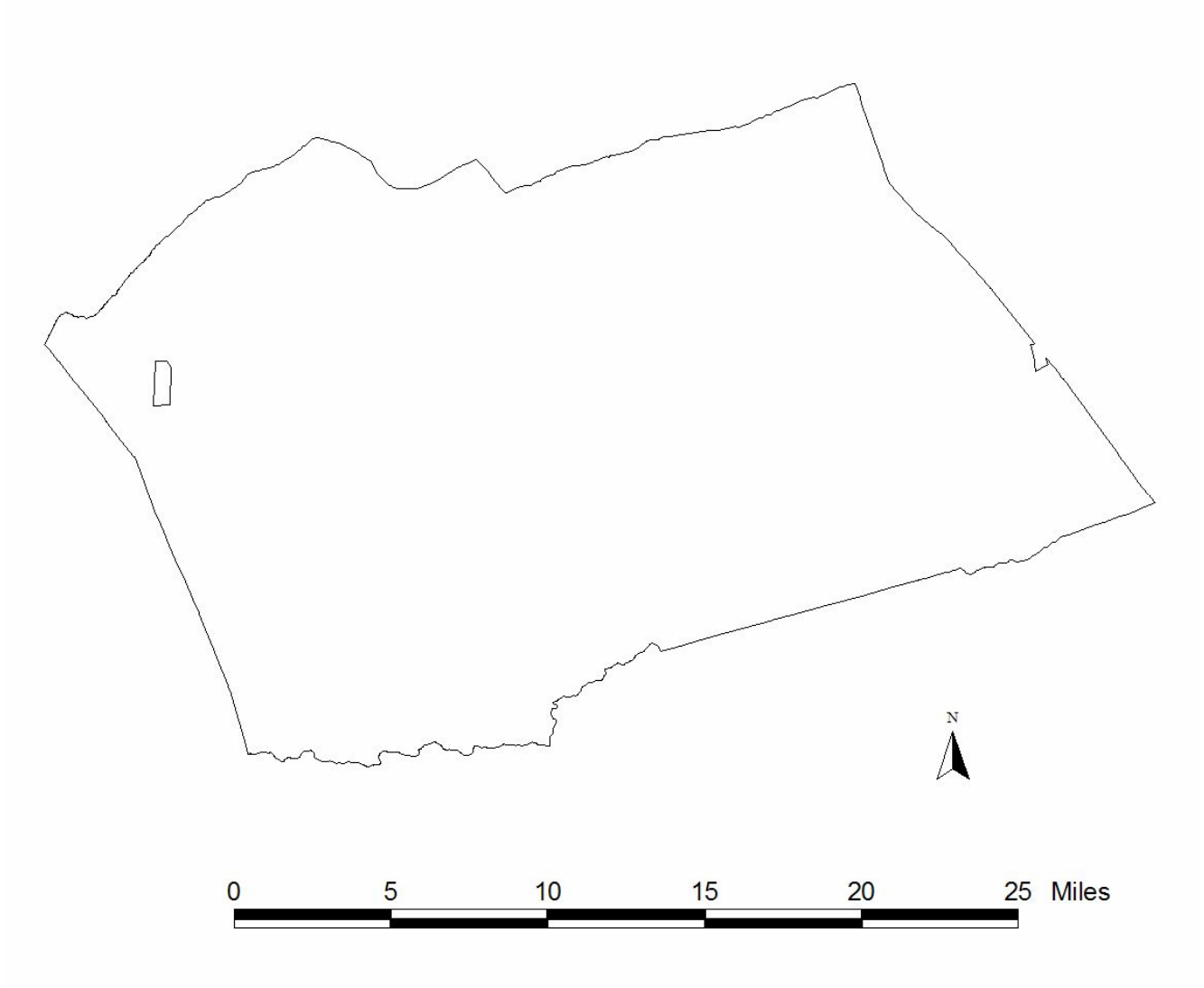
H. TREATMENT AREA MAPS

Roanoke County



H. TREATMENT AREA MAPS

Wythe County



## H. TREATMENT AREA MAPS

